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RESEARCH REPORT

Evaluation of Intranet Development Opportunities, U.K.

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1997

Evaluation of Intranet Development Opportunities, U.K.

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Abstract

The Intranet phenomenon has taken many IT vendors by surprise. As vendors rush to integrate Intranet functionality into their products and to provide Intranet services, the need to ascertain the plans and requirements of users is critical.

This report provides:

- Analysis of 250 UK users' Intranet usage patterns, future plans, applications, use of services and budgeting issues
- A breakdown of the Intranet-related opportunities open to IT vendors
- A forecast of the UK Intranet market, 1997-2001.

Analysis is presented by users' current stage of Intranet development and by major industry sector to provide a thorough view of the state of the Intranet market in the UK.

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I

Introduction

A

Objectives and Scope

The Intranet phenomenon is unique in the IT industry for being genuinely user-driven as opposed to vendor-driven. As such, it has caught many IT vendors by surprise. With the acceleration of development cycles inherent in the new wave of IT represented by the Internet and Intranets, vendors need to catch up rapidly with market development to stay ahead of the competition and to be able to meet user requirements.

This report attempts to identify the opportunities open to IT services vendors in the Intranet market by measuring aspects of current and future Intranet development, with particular attention to:

- Use of external Intranet services
- Patterns of Intranet development and usage
- Concerns about and obstacles to Intranet development
- Intranet budgeting issues

B

Research Methodology

INPUT interviewed 250 large UK companies during January 1997. Exhibits I-1 and I-2 show the sample breakdown by size of company and industry sector respectively.

Exhibit I-1

Sample by Revenues

Revenues	% of Sample
Over £500m	58
£100m to £500m	22
Under £100m	20

Source: INPUT

Exhibit I-2

Sample by Industry

Industry	% of Sample
Process manufacturing	18
Discrete manufacturing	16
Services	15
Government	14
Insurance	7
Banking and finance	6
Retail	6
Transportation	3
Utilities	2
Wholesale	2
Communications	2
Medical	1
Education	1
Cross-industry	1
Other/not named	6

Source: INPUT

This report defines four categories of interviewees according to their stage of Intranet development:

- "Intranet Owner"—company had already built an Intranet
- "Intranet Builder"—company was in the process of building an Intranet
- "Intranet Evaluator"—company was in the process of making a decision whether or not to build an Intranet
- "Intranet Rejector"—company had considered and decided against building an Intranet

The above descriptors (with and without the "Intranet" prefix) are used throughout this report to indicate the type of respondents under discussion. Exhibit I-3 shows the sample breakdown by these descriptors.

Exhibit I-3

Sample by Intranet Status

Category	Description	% of Sample
Owners	Organisations already with an Intranet	11
Builders	Organisations building an Intranet	20
Evaluators	Organisations considering an Intranet	64
Rejectors	Organisations who have considered and rejected an Intranet	5

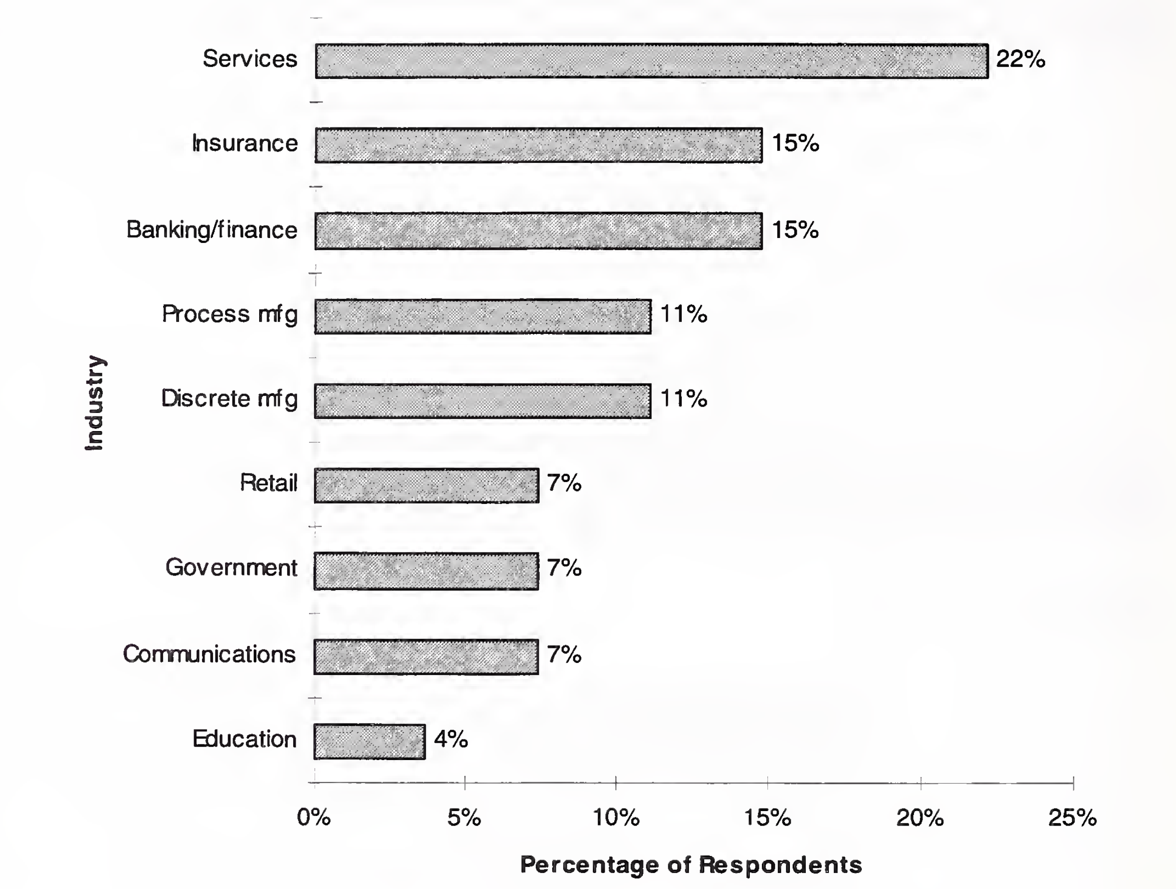
Sample: 250 *Source: INPUT*

The survey sample was designed to limit the number of Intranet Rejectors interviewed to five percent of the total sample of 250 organisations. This limit was imposed to avoid the sample being overloaded with Rejectors, which would be statistically representative of UK organisations overall, but which would also yield little useful data. Beyond this limit, no restriction was placed on the number or proportion of Owners, Builders and Evaluators interviewed.

Exhibits I-4, I-5 and I-6 show the breakdown by industry among Owners, Builders and Evaluators respectively. While the manufacturing industries combined form the largest group within the overall sample, they are not represented as highly among organisations already with an Intranet (Owners). Early Intranet adopters appear to be the services and financial industries.

Exhibit I-4

Sample by Industry (Intranet Owners)

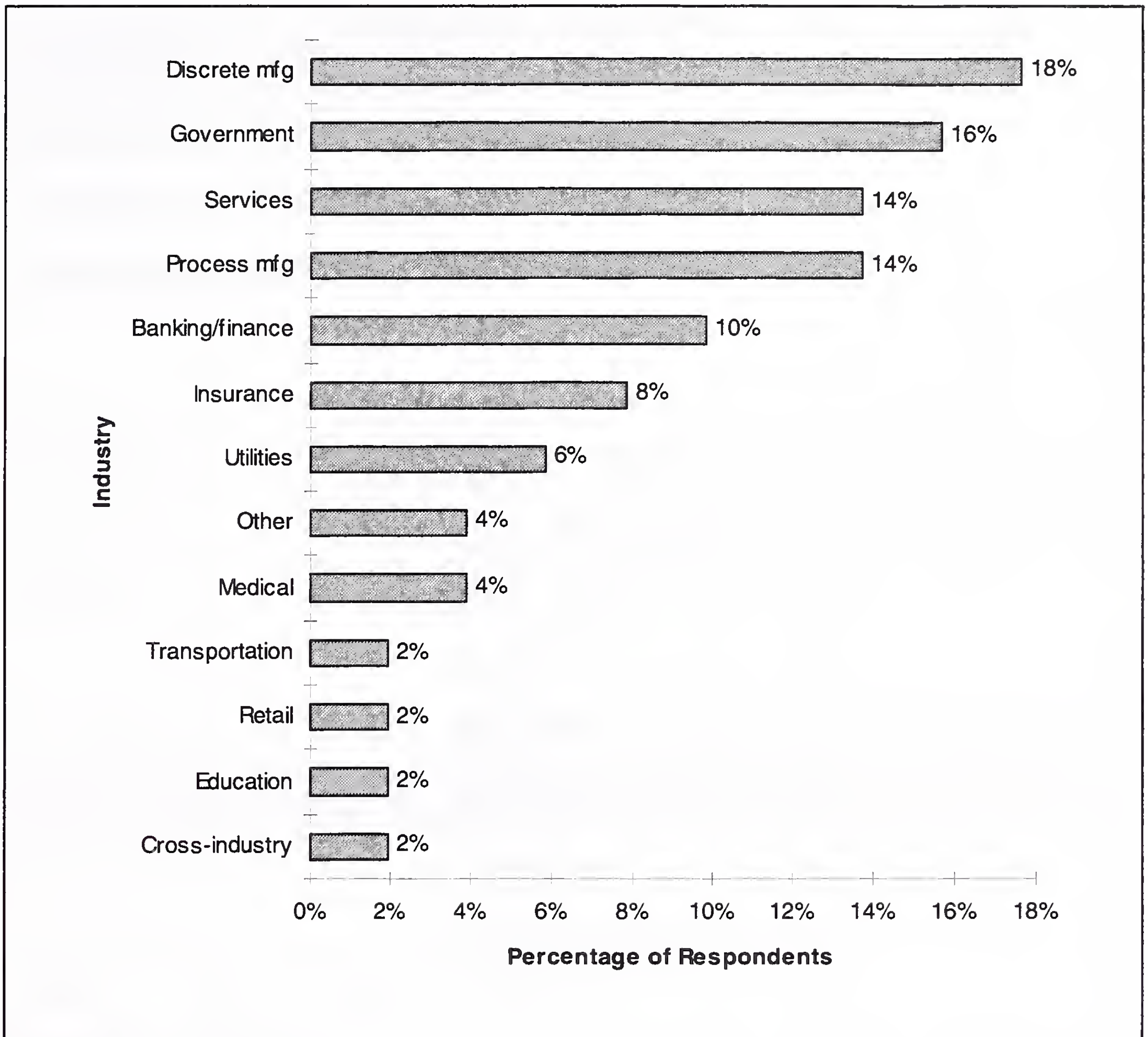


Sample: 27

Source: INPUT

Exhibit I-5

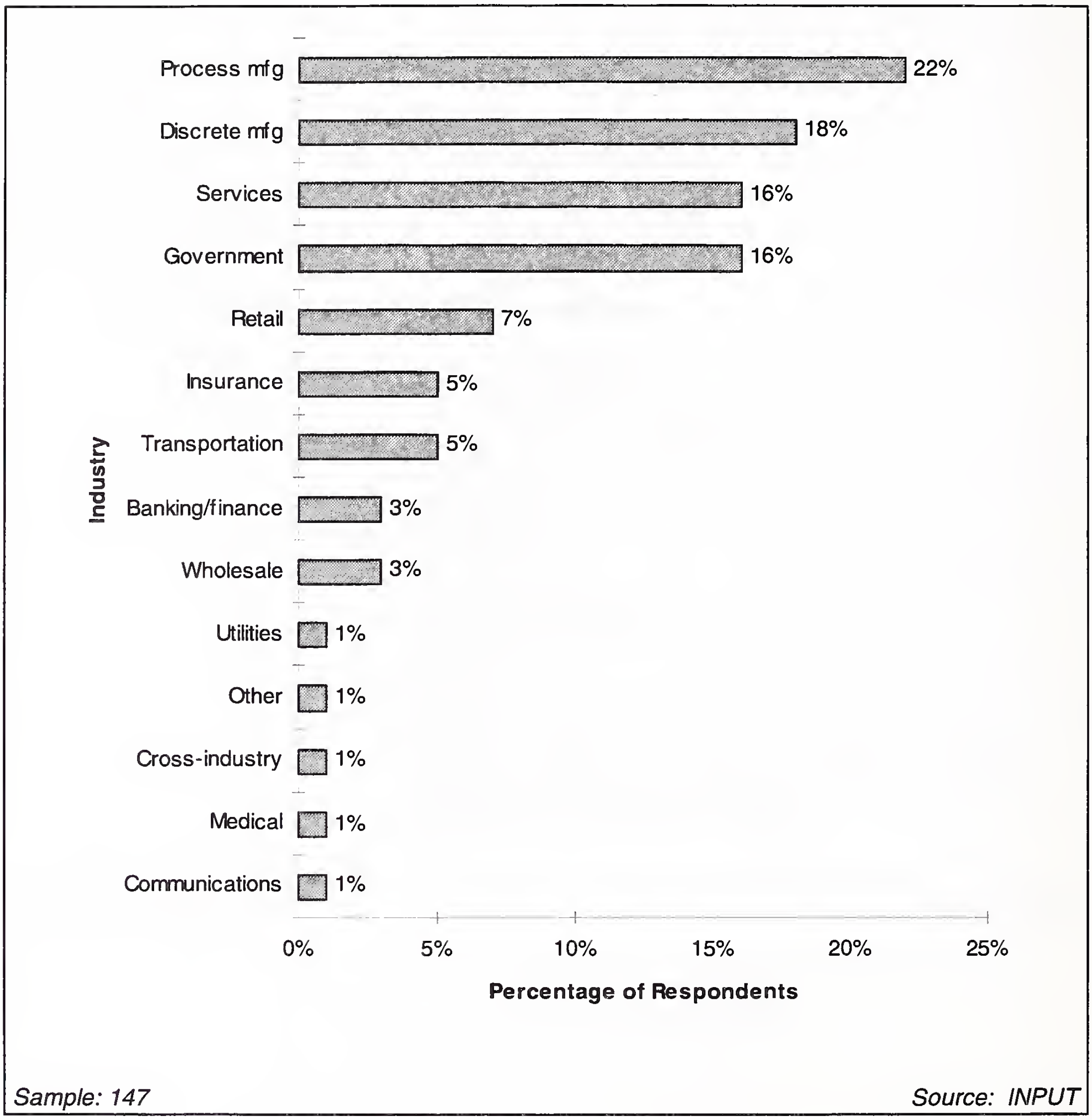
Sample by Industry (Intranet Builders)



Sample: 51 *Source: INPUT*

Exhibit I-6

Sample by Industry (Intranet Evaluators)



Sample: 147

Source: INPUT

Exhibit I-7 shows the breakdown by company size within each of the respondent categories. Early Intranet adopters tended to be large enterprises; medium-sized organisations are more likely currently to be considering an Intranet.

Exhibit I-7

Sample by Intranet Status and Company Revenues

Category	Under £100m	£100m to £500m	Over £500m	Sample
Owners	10%	16%	74%	19
Builders	17%	13%	70%	30
Evaluators	23%	26%	51%	90

Source: INPUT

Exhibit I-8 shows the timeframes by when Builders were expecting to complete their Intranet projects. The categories marked "any time" represent respondents who gave only the expected year of completion and are distinct from the rest of the sample. The largest number of Intranet projects currently underway are expected to be completed from the fourth quarter of 1997 onwards.

Exhibit I-8

Expected Intranet Completion Date (Intranet Builders)

Date of Completion	% of Builders
1997 (any time)	12
1998 (any time)	24
Q1 1997	3
Q2 1997	15
Q3 1997	3
Q4 1997 or "late 1997"	38
Q1 1998 or "early 1998"	6

Sample: 34 *Source: INPUT*

C

Report Structure

- Chapter II—Executive Summary, presents a summary of the key findings of this report, plus UK Intranet market forecasts.
- Chapter III—Platform Usage, shows the hardware and operating system platforms used for Intranets.
- Chapter IV—Motives for Intranet Development, analyses users' reasons and motivations for developing Intranets.
- Chapter V—Effect of Intranet on Existing Systems, discusses the priority given to Intranets relative to existing IT, future impact of Intranets on existing systems, and levels of integration.
- Chapter VI—Use of Intranet for Critical Data and Applications, shows use of Intranets for sensitive data and critical applications
- Chapter VII—External Intranet Services, analyses current and future use of Intranet services, importance of services, satisfaction with services and vendors used, and preferences for service procurement.
- Chapter VIII—Beyond Development: Applications and Outsourcing, discusses applications used, their procurement and management, and user intentions to outsource Intranets.
- Chapter IX—Extent of Intranet Deployment, shows the size and scope of current Intranets, departmental takeup, and levels of external connectivity supported.
- Chapter X—Intranet Budgeting, analyses sources of Intranet budgets, how budgets are allocated, and roles played by different organisational functions in Intranet activities.
- Chapter XI—Results of Intranet Development, shows the outcome of current Intranet developments in terms of meeting timescales and budgets.
- Chapter XII—Obstacles to Intranet Development, discusses the problems faced by user organisations in building their Intranets.
- Chapter XIII—Intranet Rejectors, presents the reasons given by users for deciding against Intranet development

- Appendix A—Survey Questionnaire (Intranet Owners)
- Appendix B—Survey Questionnaire (Intranet Builders)
- Appendix C—Survey Questionnaire (Intranet Evaluators)
- Appendix D—Survey Questionnaire (Intranet Rejectors)

D

Related INPUT Reports

Other INPUT reports which address topics related to the subjects discussed here include:

- *Using the Internet for Business Operations, Internet Opportunities Program, 1995*
- *Notes' Survival in the Intranet-Enabled Corporation, Internet Opportunities Program, 1996*

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II

Executive Summary

A

Introduction

Intranets represent a significant break from IT tradition. Throughout the history of IT, all new waves of development have been vendor-led; for example, mainframe, minicomputer, PC LAN and client/server uptake has been essentially supply-driven. Intranets, however, are the result of ad hoc development within user organisations. Early Intranets were informal and unplanned, often built ‘after hours’ using freely-available software, and did not rely on established user/vendor relationships.

Until 1995, many if not most IT vendors were unaware of this new development taking place on some of their customers’ sites. During that year, however, news of the Intranet phenomenon was spread quickly by an IT and business press eager to pick up on the latest hot story. By late-1996, any product vendor who had not made an Intranet-related announcement was beginning to look behind the times.

Now it is the turn of IT services vendors to catch up in the Intranet market.

The problem facing services vendors is that the legacy of ‘guerrilla’ Intranet development remains—Intranets are widely perceived as low-cost, low-effort developments, which implies low need for external services. Use of services is in fact moderate, but shows no sign of increasing in the short term—organisations who have not yet started Intranet development do not appear more likely to use services than organisations that built their Intranet in 1996 or earlier.

The current situation of Intranets among UK organisations is as follows:

- Intranets are still most commonly used for low-value applications

- The primary motive for Intranets is to extend the reach of IT within the organisation, not to save costs, as is commonly perceived
- Intranets are developed in-house with moderate use of external services, and are funded from centralised IT budgets

The greatest service opportunities lie in the following, mostly tactical areas:

- Intranet security
- Education and training
- Network infrastructure
- Intranet Web site creation
- Integration of Intranet with legacy systems
- Application development

B

Intranets Are Still in Early Phases of Use

Most large UK companies which currently have, or are building Intranets use them for relatively simple applications. Static information sharing (the equivalent of 'brochureware' on the Internet) is the most common use of Intranets, as evidenced by the following findings:

- The most common use of Intranets is for internal information distribution
- Administrative departments are the most common beneficiaries of Intranets
- The most common reason for building an Intranet is ease of access to all types of information
- Most applications run over Intranets are non-critical

Exhibit II-1 shows the phases that INPUT defines for Intranet use, starting with the 'classic' first Intranet applications and ending with total replacement of legacy platforms and applications with Intranet equivalents. While this last phase represents the logical extreme of Intranet development, INPUT does not expect this phase to be reached by many, if any, medium-sized or large enterprises.

Exhibit II-1

Phases of Intranet Use

Phase	Description	Examples
One	Static information distribution, mostly administrative	Company policy documents, staff and telephone directories and visitor registers
Two	Business unit and departmental information sharing	Product plans, financial data, customer service records and sales contacts
Three	Group collaboration	Project management, groupware and desktop conferencing
Four	Integration of existing systems and applications with Intranet	Web-enabled datawarehouse, Web front end to legacy databases, product design and live customer service querying
Five	Replacement of legacy systems with Intranet equivalents	All current applications

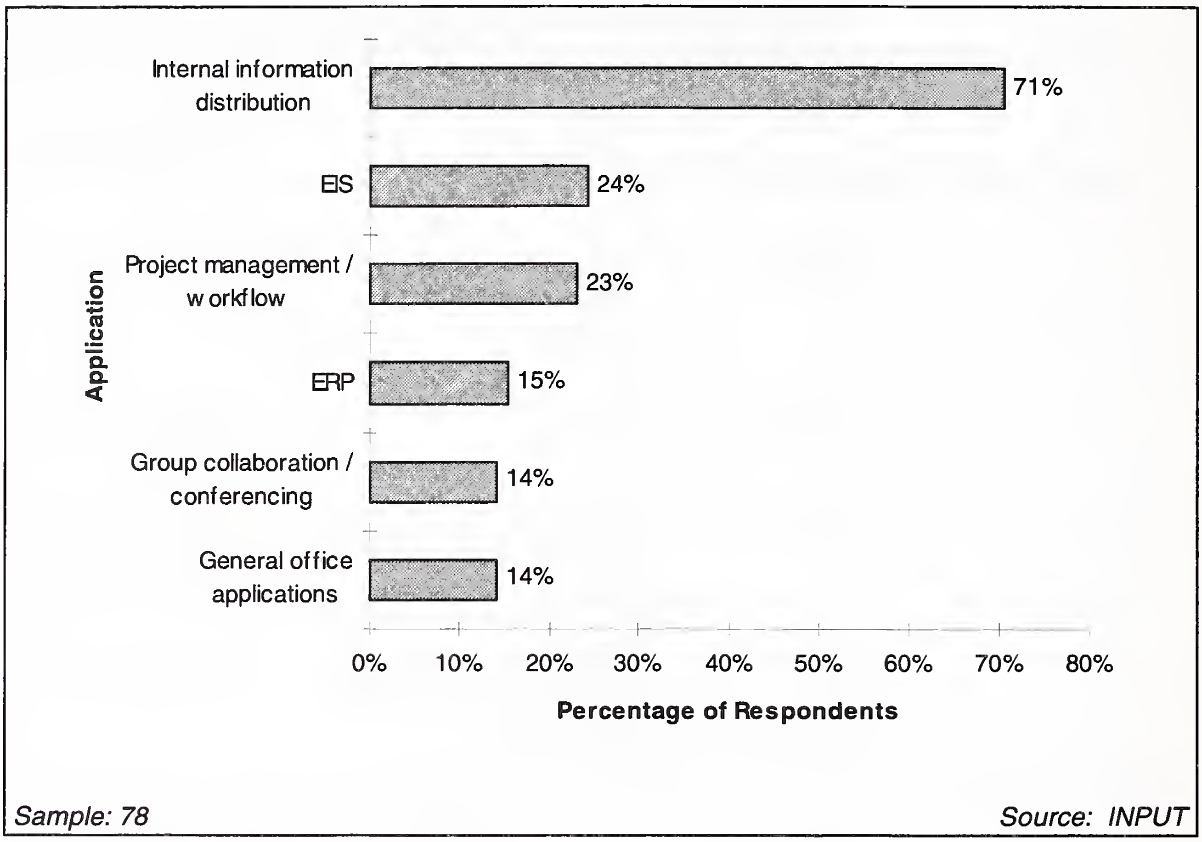
Source: INPUT

1. Intranets Are Used Primarily For Information Distribution

Exhibit II-2 shows the top six uses for which Intranets are currently adopted. Note that internal information distribution is not named as a primary application by all users. Other primary applications include EIS (using the Intranet as a knowledge base) and project management / workflow. As an Intranet does not necessarily have to be built around the model of the Web, a primary use of Intranets can be email, although this does not by itself constitute an application.

Exhibit II-2

Applications Used (Intranet Owners and Builders)



Sample: 78 *Source: INPUT*

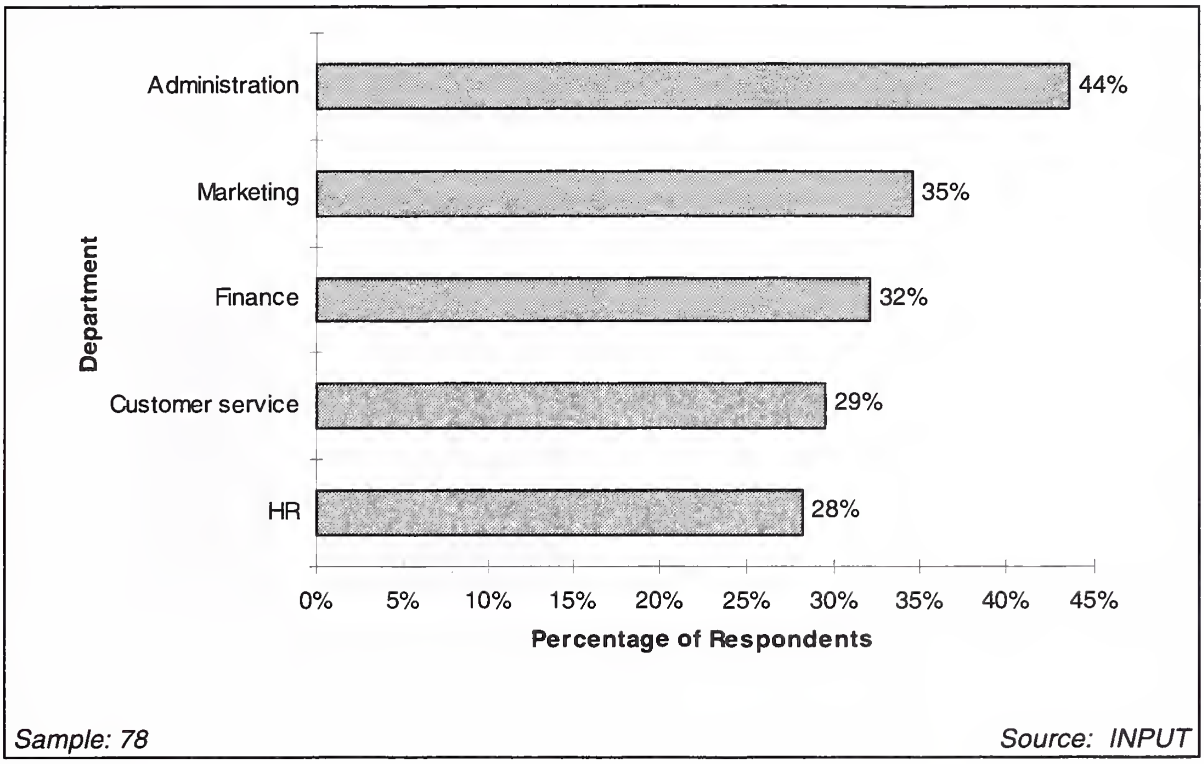
2. Intranets Benefit Administrative Departments Most

Exhibit II-3 shows the five departments within user organisations which are enjoying the greatest benefits of Intranets. Administrative departments currently gain most benefit overall. Within the manufacturing industries, engineering and R&D departments also gain particular benefits, as do finance departments within banking, and customer service departments within insurance.

Overall, knowledge workers are currently benefiting most from Intranets—areas within organisations that benefit most from Intranets are non-technical and customer-facing departments; areas that benefit least across all industries are technical and supply chain management departments.

Exhibit II-3

Departments Gaining Benefit From Intranet (Intranet Owners and Builders)



Sample: 78 *Source: INPUT*

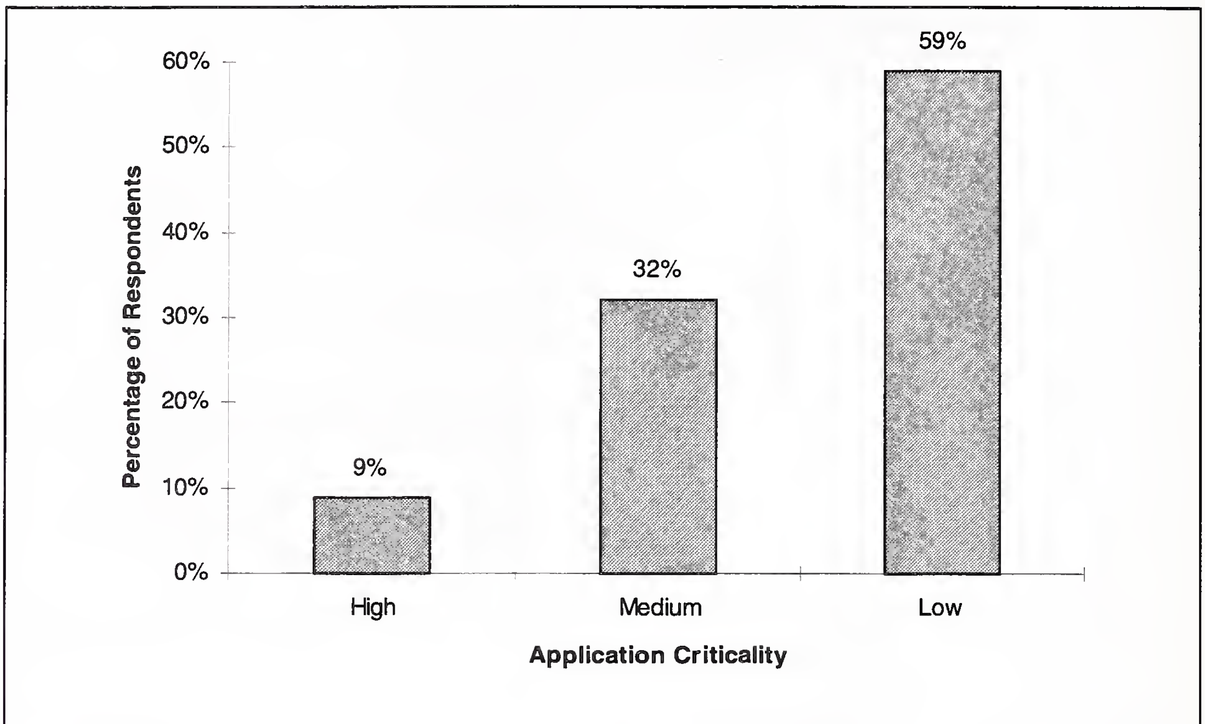
3. Intranets Are Not Used For Critical Applications

Exhibit II-4 shows the criticality of applications run over Intranets by Owners and Builders. The majority of current Intranet applications are not business-critical. However, as users integrate Intranets more into their mainstream IT, the level of application criticality will rise. INPUT estimates that the criticality of most Intranet applications will be rated as high or medium within three years, due to the increasing integration between Intranets and existing corporate systems.

The fact that most applications are non-critical indicates further that most Intranet usage is still in Phases One and Two.

Exhibit II-4

Most Critical Application Run on Intranet (Intranet Owners and Builders)



Sample: 78 *Source: INPUT*

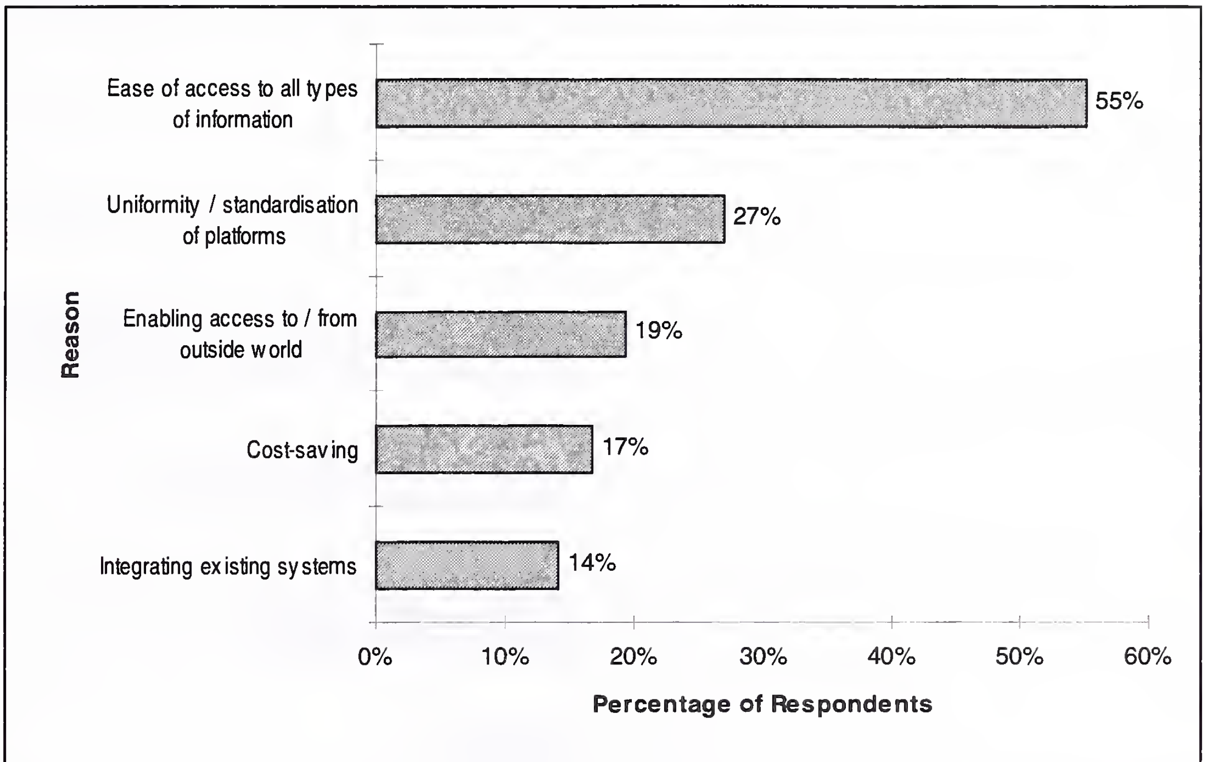
C

Intranets Are Built to Extend IT, Not Just to Save Costs

It has been widely reported that Intranets are being developed primarily for cost-saving reasons. This is not the case. Exhibit II-5 shows the top five reasons given by Owners and Builders for building their Intranets, of which cost-saving is fourth, given as a primary reason by just 17% of respondents.

Exhibit II-5

Reasons for Building an Intranet (Intranet Owners and Builders)



Sample: 78 *Source: INPUT*

Intranets will undoubtedly save cost in information distribution. For example, a large US services company interviewed in depth for INPUT's report *Using the Internet for Business Operations* (1996) stated that it more than offset the cost of researching, designing and developing its Intranet by distributing its company policy documents electronically instead of on paper. Similar cost-saving case studies have been reported elsewhere.

Even within information distribution, however, some extra cost is incurred by adopting an Intranet. As information can be updated dynamically, users may have higher expectations of its timeliness, reinforced by their experiences of visiting Web sites on the Internet which are updated frequently. Meeting this heightened expectation will incur additional resource requirements. Furthermore, the near-zero cost of distributing information over an Intranet may make it more difficult to justify infrequent updates.

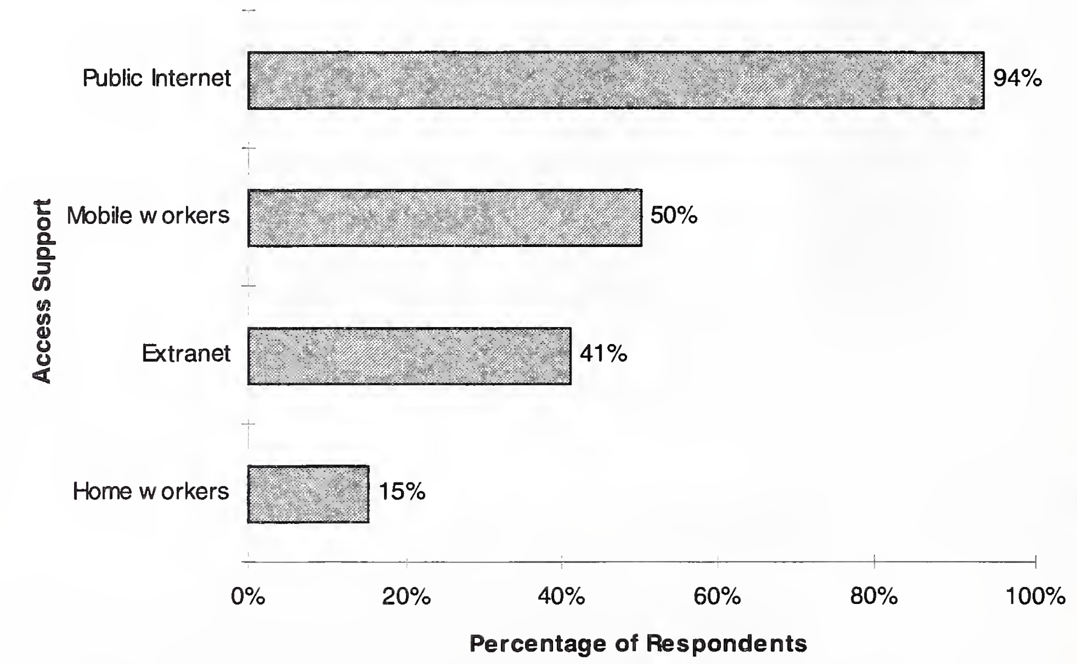
The three most common reasons for building an Intranet as shown in Exhibit II-5 are all about extending the reach of data and applications, within and without the organisation.

Due to the high level of commonality between Intranet and Internet, distributing and viewing information across the two environments is not a complex issue. For this reason, Intranets are a natural choice for organisations wishing to extend communication beyond the corporate network.

The different types of external connectivity supported are shown in Exhibit II-6. Nearly all Intranets are connected to the Internet for the reasons given above.

Exhibit II-6

Connectivity Supported (Intranet Owners and Builders)



Sample: 78 *Source: INPUT*

The specific purposes for supporting external connectivity differ in their popularity. Mobile working is the most commonly supported purpose, yet home working, an often-cited benefit of Intranets, fares less well. Home working (or "telecommuting") is less advanced in the UK than in the US, but is expected to increase in popularity as Internet access from the home increases, bandwidth improves and, most importantly, working practices change.

Extranet connectivity (allowing access to and from the Intranets of specified customers and suppliers via the Internet) is supported by nearly half of organisations with or building an Intranet. While the market for full-function Extranet applications is still embryonic, not all users require such applications. Simple access to another organisations' Intranet qualifies as an Extranet, even though what can be done thereafter may be limited. The relatively high proportion of respondents claiming Extranet connectivity does not, therefore, indicate extensive use of Extranet applications (commerce, for example), but indicates that the basic infrastructure is in place in those organisations, even if only for simple functions such as file transfer.

D

Vendor Opportunities Lie in Under-Used and Integration/Replacement Services

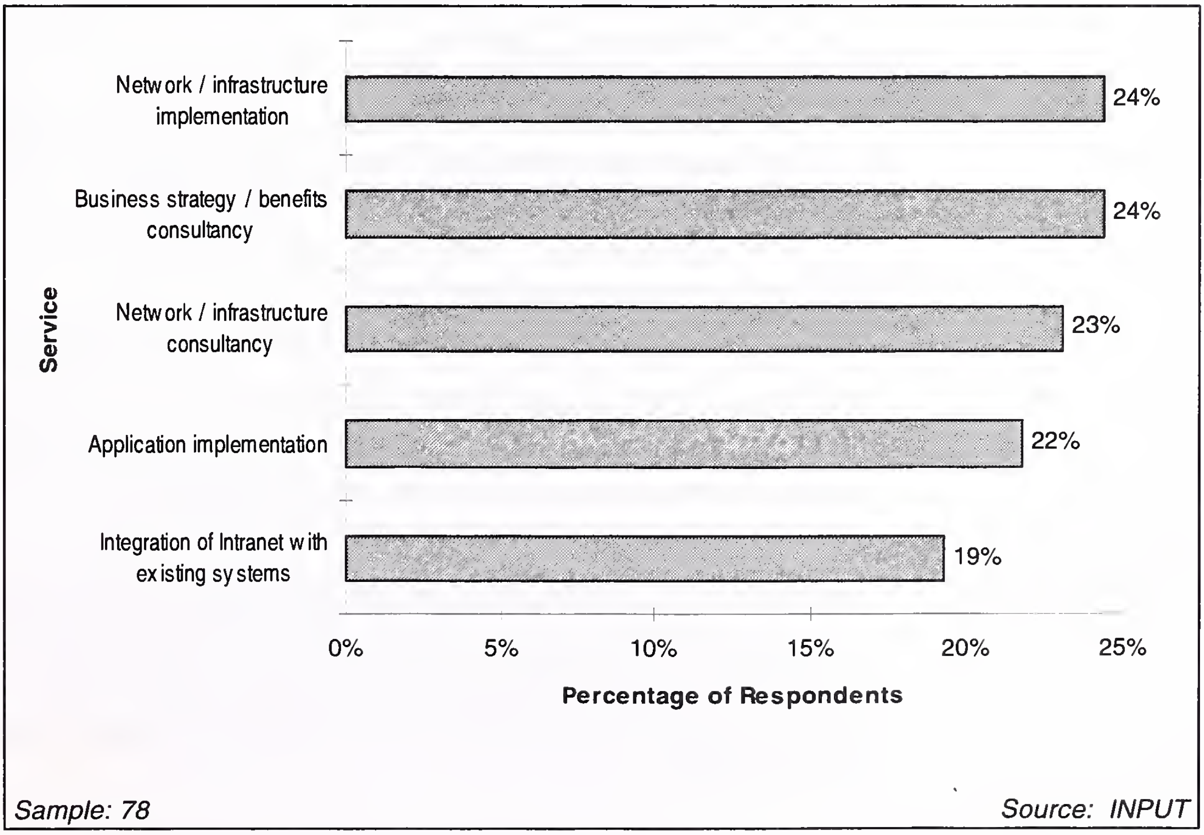
1. Use of Intranet Services is Moderate, Yet No 'Killer Service' Currently Exists

The first Intranets were built experimentally and on a small scale, limited initially to the departments in which they were written: IS, or technically-oriented departments such as R&D.

The effects of this first wave of Intranet development are still felt: most Intranets are built internally. Exhibit II-7 depicts the five most common external services used by organisations with or building an Intranet, and shows that there is currently no singularly popular Intranet service.

Exhibit II-7

External Intranet Services Used (Intranet Owners and Builders)



Sample: 78

Source: INPUT

Intranet service penetration is moderately high overall—out of nine service offerings measured, all but one (education and training) have been employed by 14% or more of Intranet users. However, no single service stands out as particularly popular: there is currently no 'killer application' in the Intranet services field. For example, network / infrastructure implementation is the joint most popular service, yet three quarters of users accomplish the initial stage of Intranet development—implementing the network infrastructure—by themselves.

Despite the in-house nature of most Intranet development, business strategy consultancy is the joint most popular service used to date. However, organisations currently considering an Intranet and yet to embark on development are less likely to use that type of service (14% compared with 25% shown in the Exhibit above). This suggests that:

- Early adopters sought a guiding hand to assist them in evaluating the benefits of and strategy behind an Intranet at a time when Intranets were new and comparatively little information or case study material was available.

- Services vendors will in the future have to work harder per prospect to sell Intranet-related business strategy consultancy.

In addition to Intranet development, there is relatively little intention to look externally for either applications or network operation. Among companies with or building an Intranet:

- Most applications are developed in-house (64%). Custom development and packaged applications are used in almost equal measure.

- Most organisations (80%) do not intend to outsource their Intranet.

2. Services Considered Most Important Are Those Used Least

The four services considered most important by users include the three that are used least: security consultancy / implementation, Intranet Web site design / creation, and education and training. Exhibit II-8 shows the six external services considered most important by users.

Rated at 4.1 out of five, only security-related services can be described as 'very important' to users (particularly so in banking and finance), yet such services have been used by only 14% of Intranet users. There is a significant market opportunity for Intranet security consultancy and implementation, for example:

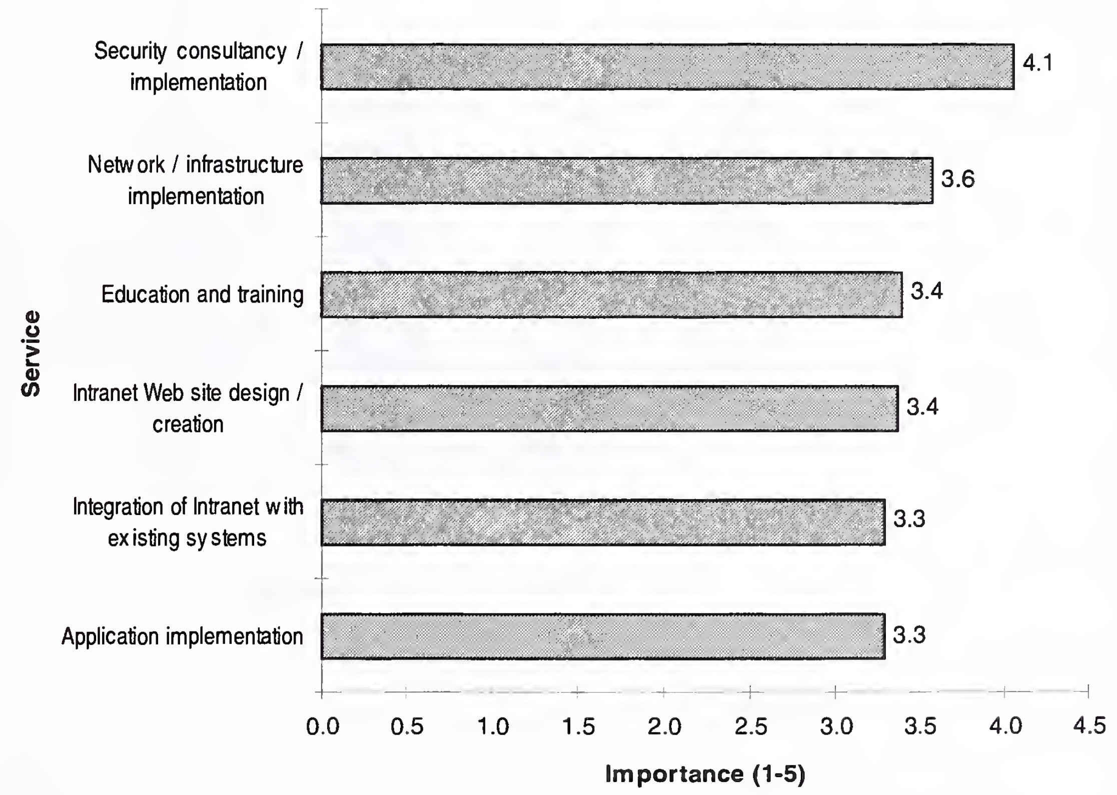
- Inter-departmental Intranet firewall solutions

- Network access control and ‘single sign-on’
- Transport security: encryption and integrity
- Data security: user authentication and access management

Conversely, IT managers regard consultancy services as least important, but such services are by no means the least used. Vendors should be aware that despite moderate use of consultancy to date, IS departments are the biggest provider of Intranet budgets yet they appear not to value consultancy services highly.

Exhibit II-8

Importance of External Intranet Services (Intranet Owners and Builders)



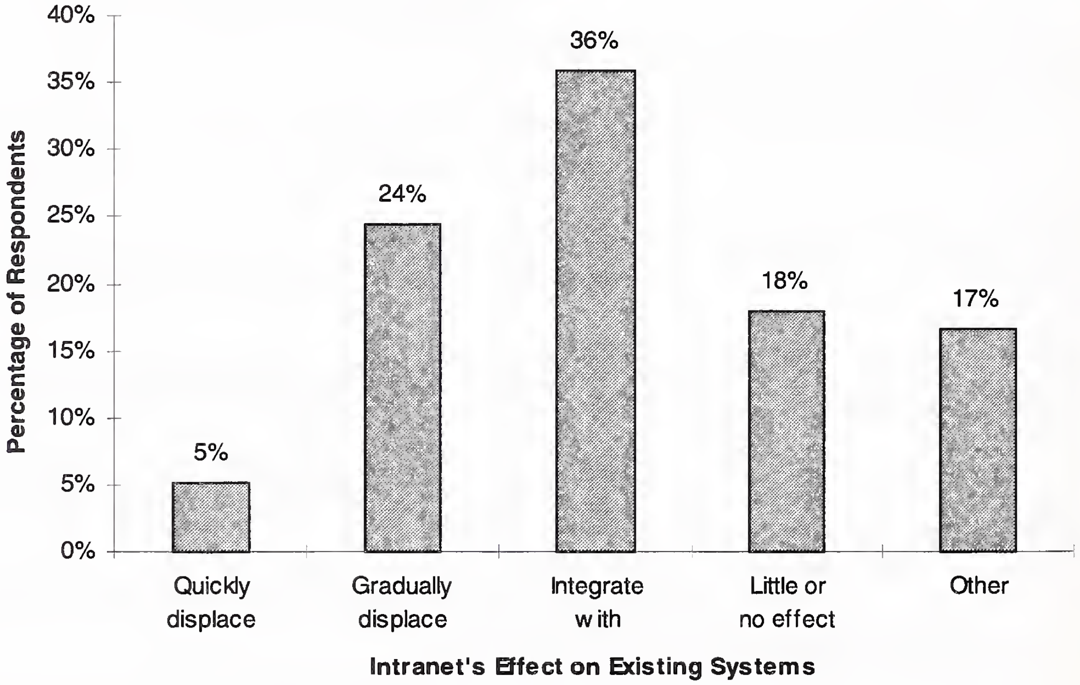
Sample: 69 *Source: INPUT*

3. Intranets Are Currently Additive, But Will Displace or Integrate With Existing Systems

Intranets are currently additive to existing systems, but two thirds of UK IT managers believe that between 1997 and 1999, their Intranet will begin displacing existing systems or will integrate into the existing IT infrastructure. Most of those who anticipate displacement believe it will be a gradual process: few organisations are planning for rapid obliteration of current systems (Exhibit II-9).

Exhibit II-9

Effect of Intranet on Existing Systems Over Two Years (Intranet Owners and Builders)



Sample: 78

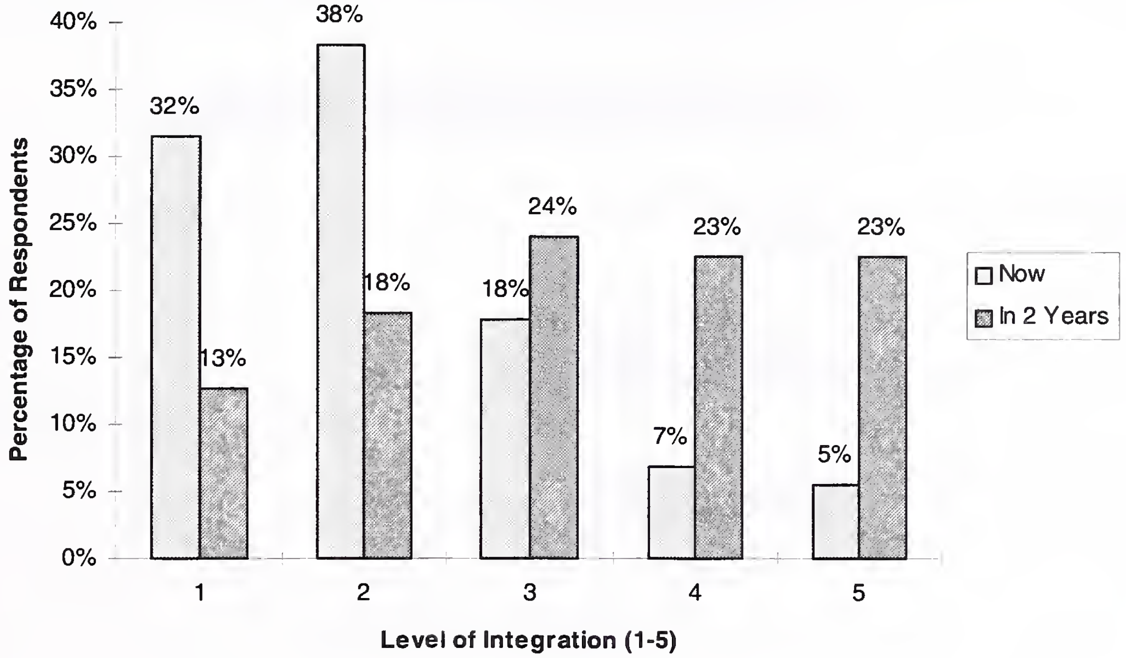
Source: INPUT

Balanced against these findings, however, is the 18% of users who believe that Intranets will have little or no effect on existing systems. While this body of users is in the minority compared with those who foresee integration or displacement, they must be addressed. INPUT believes that the proportion of users anticipating little or no effect on existing systems by an Intranet will decrease over time: as the value of applications run over Intranets increases, so the potential for Intranets to play a central role in user organisations will increase. Vendors faced with users who do not expect their Intranet to have an effect on existing systems should offer case studies and technology demonstrations within a business strategy / benefits consultancy offering.

As shown above, the most commonly anticipated scenario within two years is that Intranets will integrate with existing IT. Exhibit II-10 shows the levels of integration currently achieved and expected in that timeframe. Very little integration is apparent currently, reflecting Intranets' beginnings as off-line, 'out of hours' projects. By 1999, integration of Intranets and current systems will have increased greatly, with users who expect little integration in the minority.

Exhibit II-10

Levels of Integration Between Intranet and Existing Systems, 1997 and 1999 (Intranet Owners and Builders)



Average 1997: 2.2
Average by 1999: 3.2

Sample: 73

Source: INPUT

E

IS Department Remains Biggest Target For Intranet Services

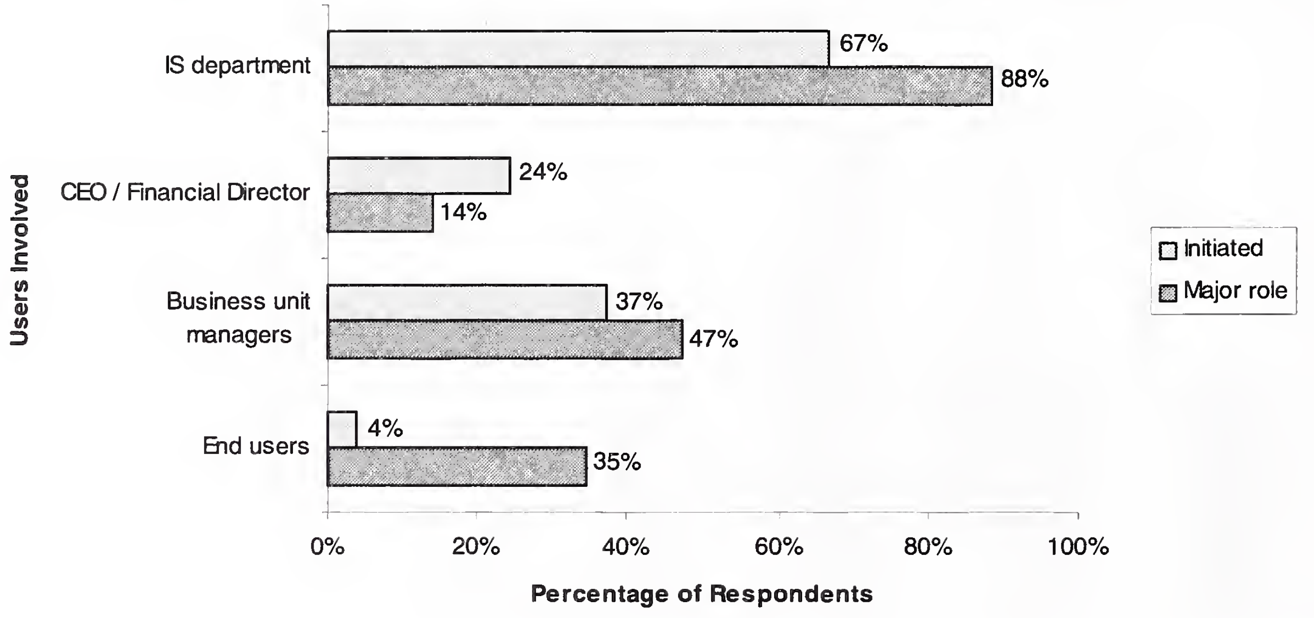
IS departments currently take the most active role in both initiating and playing a major ongoing role in Intranet development, followed by business unit managers. Little initiation comes from end users, but they play a significant part in ongoing development.

As Intranets move more into the mainstream of IT, it appears that IS departments may play less of a central role in their development. Early adopters (Owners) were driven particularly by IS; Builders are driven less so, and Evaluators less still. However, IS plays the most active role in Intranet development overall across all types of user.

A significant part is played by CEOs and Financial Directors in terms of initiating Intranet activity, and they should therefore be targeted for Intranet services. Business unit managers should be targeted for application-specific Intranet solutions.

Exhibit II-11

Roles Played in Intranet Activities (Intranet Owners and Builders)



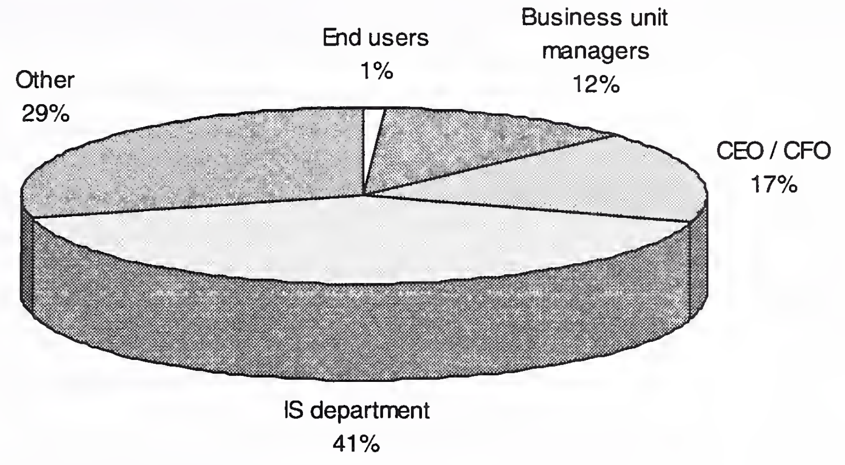
Sample: 78 *Source: INPUT*

The largest proportion of Intranet budgets is set by corporate headquarters and provided by a central IT budget. Around three quarters of Intranet Owners' and half of Builders' budgets were set in this way.

A common pattern of Intranet budgeting is for startup activities to be funded and conducted by IS, but thereafter shared regionally and functionally—benefiting departments, divisions and branch offices are expected to contribute towards Intranet budgets.

Exhibit II-12

Intranet Budget Sources (Intranet Owners and Builders)



Sample: 58 *Source: INPUT*

F
Industry-Sector Opportunities

Exhibit II-13 shows opportunities for Intranet services within individual industry sectors, based on the findings of this project.

Exhibit II-13

Intranet Services Opportunities by Industry

Industry Sector	Opportunities
Banking and finance	Intranet security: • Is biggest user of Intranet security services to date • Named security as above-average obstacle Cross-departmental Intranet integration: • Named largest number of departments as benefiting from Intranet • Stated platform uniformity as above-average reason for building Intranets
Manufacturing (process and discrete)	Manufacturing-specific applications: • Both stated engineering/R&D departments receive above-average benefit from Intranet use • Both stated administration and customer service departments receive under-average benefit Intranet site design: • Both stated Intranet design as above-average importance • Discrete manufacturing is biggest user of Intranet design services
Government	'Phase One' applications: • Stated administrative departments receive above-average benefits from Intranet use • Gave information access as above-average reason for building Intranets Consultancy services: • Uses strategy consultancy more than any other service and considers it of above-average importance
Insurance	Multi-discipline service offerings: • Is biggest user of Intranet services overall • Named in-house skills shortage as above-average obstacle to building Intranets Emphasise long-term cost benefits: • Stated cost-saving as above-average reason for building Intranets... • ... but declared funding issues as below-average onstacle. Therefore, is prepared to invest in order to save Legacy replacement services: • Believed strongly (50%) that Intranets will displace existing systems by 1999
Retail	Advanced Intranet applications: • Rated 'lead-in' services (Intranet design and strategy consultancy) as lowest importance of all industries • Stated funding issues were below-average obstacle • Rated 'Phase One' applications (information access) and departments (admin and HR) below-average • Rated security, application consultancy/implementation and education/training as highly important
Services	Intranet integration in secure environment: • Rated integration services more important than any other industry • Named security as above-average obstacle

Source: INPUT

G

Recommendations

Exhibit II-14 presents a summary of the Intranet service offerings INPUT recommends based on the findings of this project.

Exhibit II-14

Recommended Intranet Service Offerings

Service Offering	Examples
Integration—services and products designed to bring existing, non-Internet servers and databases into an Intranet	*Network infrastructure*—implementation of TCP/IP throughout the organisation at desktop and server level, installation and configuration of Web clients and servers, integration of Intranet-enabled NOSs with legacy NOSs (for example: UNIX, Windows NT or IntraNetware with SNA or Netware)
	Web front-ending—to allow Web clients to access existing, non-Intranet applications using Intranet protocols such as HTTP and IIOP (for example: using Java Beans, Oracle WebForms or SCO Tarantella)
	Data formatting—to enable servers to receive, store and supply information in Internet and Intranet formats (for example: HTML and IIOP)
	Intranet design—to design and structure a navigable Intranet site or sites, including conversion of existing company documents to HTML
Transition—services and products designed to migrate users from current systems to Intranet-specific solutions	*Network infrastructure*—implementation of TCP/IP throughout the organisation at desktop and server level, installation and configuration of Web clients and servers, migration of legacy NOSs to Intranet-enabled NOSs (for example: SNA or Netware to UNIX, Windows NT or IntraNetware)
	Application migration—re-engineering of legacy applications to the Intranet platform (for example: using Java), conversion of object models from legacy to Intranet (for example: OLE or OpenDoc to AxtiveX or IIOP)
	Data migration—reconfiguration of existing server-based data from existing formats to Intranet format (where no add-on is available to generate HTML dynamically from the server)
	Intranet design—to design and structure a navigable Intranet site or sites, including conversion of existing company documents to HTML
	Environmental services—decommissioning mainframe systems where appropriate
Security	*Network and transport security*—Intranet border and departmental firewall solutions, network access control, 'single sign-on', Intranet business continuity
	Data security—encryption, user authentication, information access management, Intranet business continuity
Education and training	*Education*—case studies, technology demonstrations, seminars and conferences
	Training—user training, IS developer training, developer workshops

Source: INPUT

H

Market Forecasts

Exhibits II-15 to II-18 show the UK markets for Intranet-related:

- Systems integration—provision of a complete Intranet solution, including project management and single point-of-contact. Intranet systems integration may cover development of a 'standalone' Intranet, distinct from existing IT infrastructure, or may cover integration of existing IT with an Intranet.

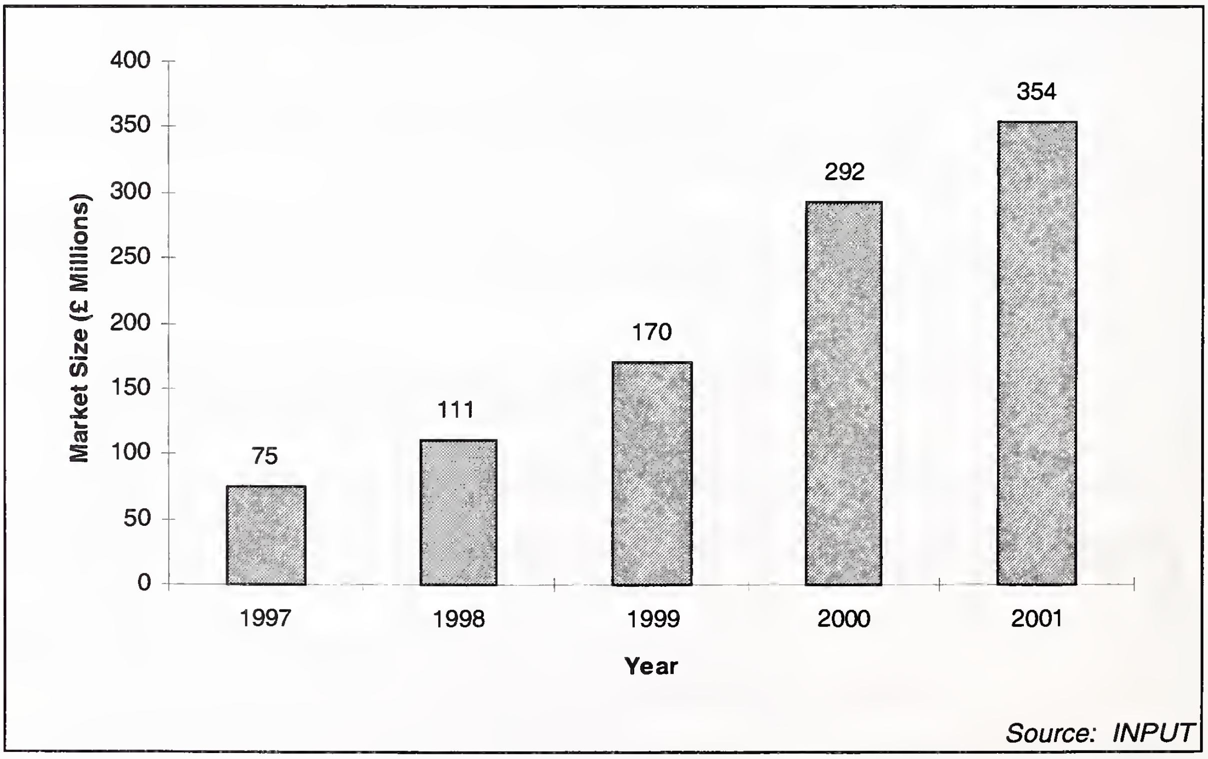
- Professional services—provision of Intranet-related custom software development, consultancy, and education and training

- Systems software products—sales of products designed to provide Intranet infrastructure, for example: TCP/IP stacks, object frameworks and middleware.

- Application software products—sales of products designed to support operational or administrative business processes, including cross-industry and industry-specific software.

Exhibit II-15

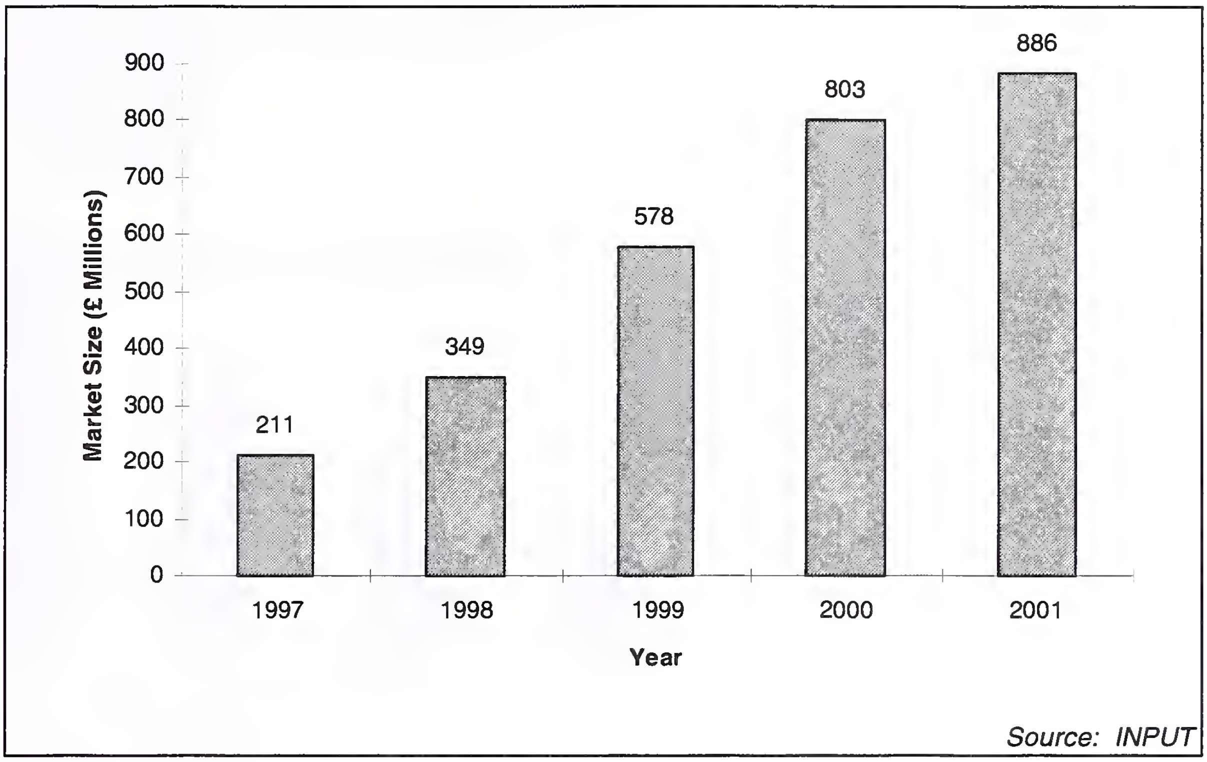
UK Intranet Systems Integration Market, 1997-2001



Source: INPUT

Exhibit II-16

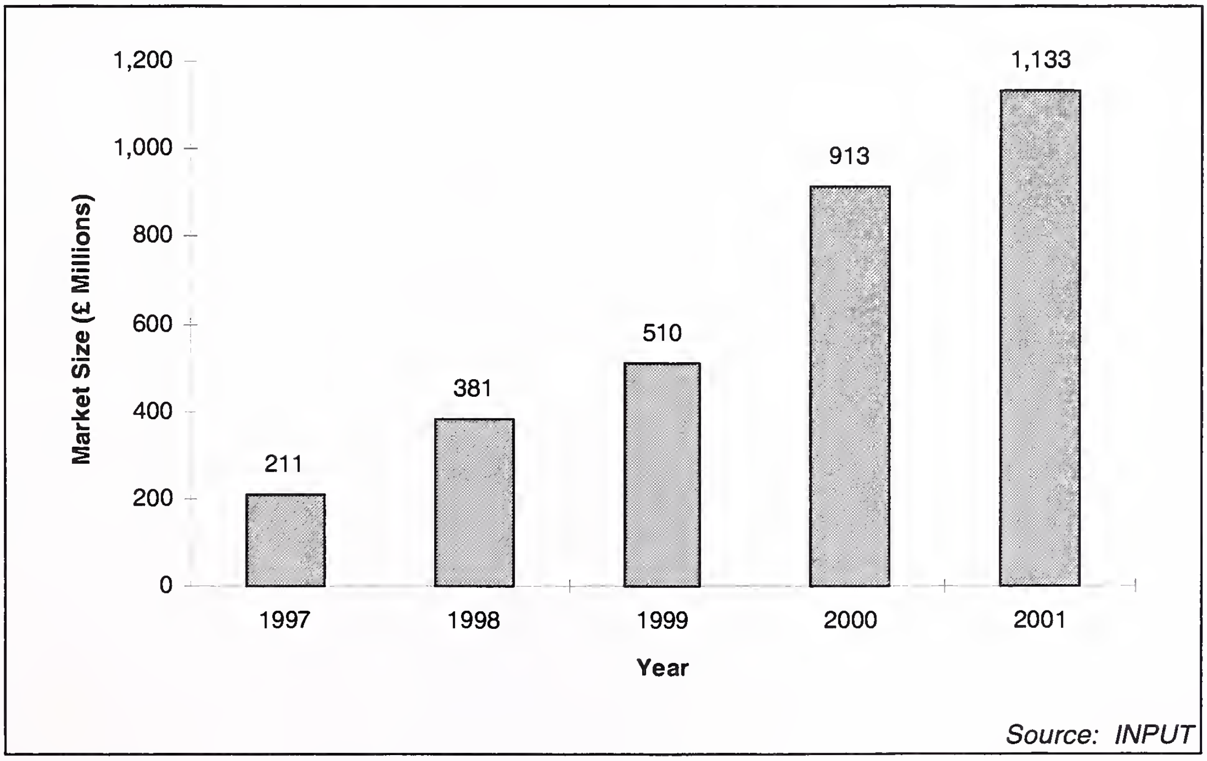
UK Intranet Professional Services Market, 1997-2001



Source: INPUT

Exhibit II-17

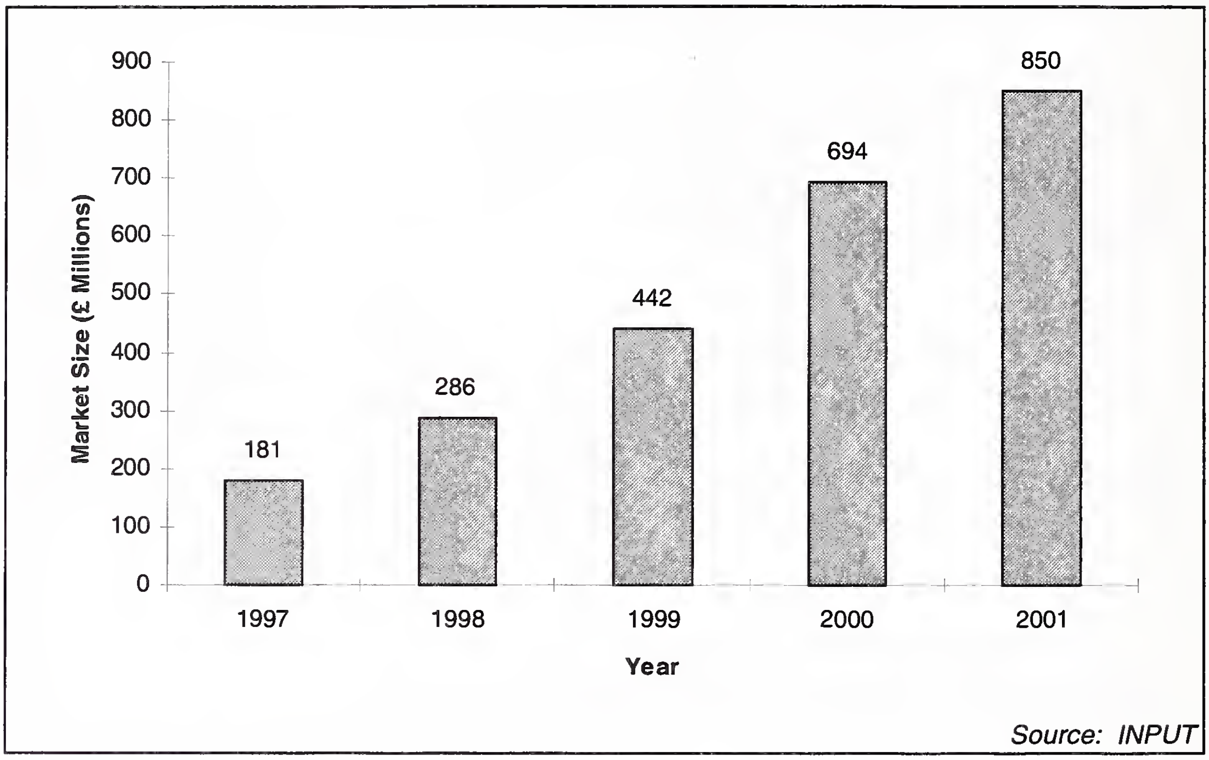
UK Intranet System Software Product Market, 1997-2001



Source: INPUT

Exhibit II-18

UK Intranet Application Software Product Market, 1997-2001



Source: INPUT

III

Platform Usage

A
Client Operating Systems

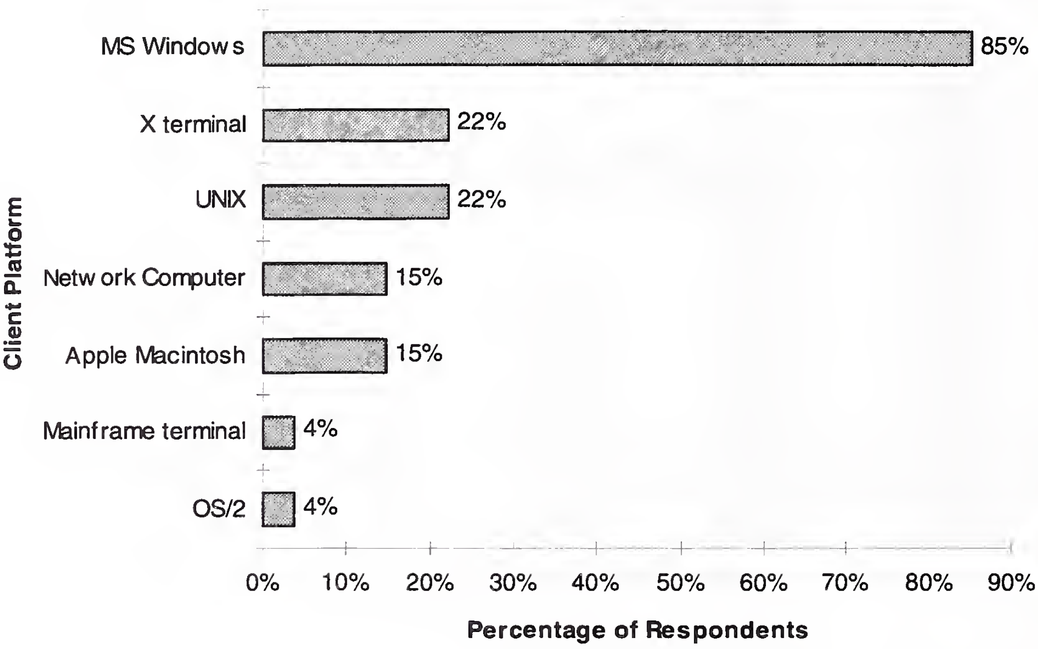
1. Current Client Usage

a. Intranet Owners

Exhibit III-1 shows the primary client platforms that Intranet Owners currently use to access their Intranet. Most, 85%, use Windows-based PCs as a primary Intranet access client, followed by X terminals and UNIX, each used by 22% of the sample. Network Computers are used for Intranet access by 15%.

Exhibit III-1

Client Operating Systems Used for Intranet Access (Intranet Owners)



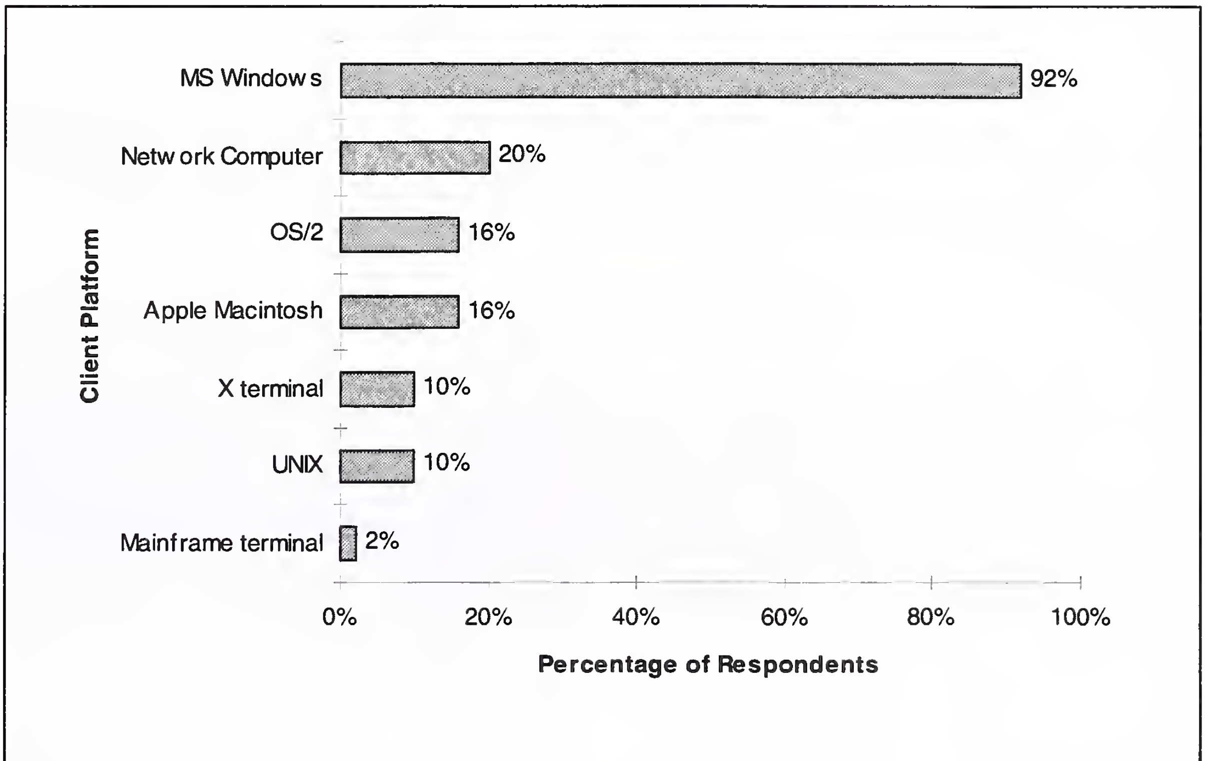
Sample: 27 *Source: INPUT*

b. Intranet Builders

Exhibit III-2 shows the primary client platforms that Intranet Builders expect initially to use to access their Intranet. Nearly all, 92%, said that Windows-based PCs would be a primary Intranet access client, followed by Network Computers, named by 20%. UNIX was named as a primary client by only 10%, below OS/2, Apple Macintosh, and X terminals. The relatively high anticipated popularity of Network Computers will have an affect on the expected use of X and mainframe terminals, as such devices are widely recognised as being prime targets for replacement by NCs.

Exhibit III-2

Client Operating Systems to be Used for Intranet Access (Intranet Builders)



Sample: 51 *Source: INPUT*

It appears that, at the time of interviewing, organisations which already had an Intranet were more UNIX-oriented and less Windows-oriented than those still in the process of building an Intranet. This pattern is in line with the shifting pattern over time of commercial use of the public Internet. Early Internet users were likely to be more UNIX-oriented than the commercial world overall, which can be seen by the choice of UNIX as a preferred Internet server operating system.

Over time, the platform breakdown of organisations with established Intranets will converge with the industry norm, to which Exhibit III-2 is closer.

2. Expected Change in Client Usage

a. Intranet Owners

Out of the 85% of Owners who named Windows-based PCs as Intranet clients, 78% (18 respondents) forecasted their changing use over the next two years. Of these 18 respondents, half believed PCs would increase in use, one forecast a decrease in use, and the remainder believed their use would stay the same.

Four Owners were using NCs at the time of interviewing. The number of respondents who stated their use of NCs would increase is greater than the number of current NC users, which indicates future NC purchases for Intranet access.

Due to the small samples involved for the other types of client platform, it is not possible to measure accurately their expected change in use. For reference, however, the full figures are given in Exhibit III-3. The figures refer to numbers of respondents, not to percentages.

Exhibit III-3

Expected Change in Intranet Client Operating System Use Over Two Years (Intranet Owners)

Client Platform	No. who currently use	Expect to increase	Expect to decrease	Expect to stay the same
MS Windows	23	9	1	8
UNIX	6	2	2	1
X terminal	6	1	5	0
Apple Macintosh	4	0	0	2
Network Computer	4	9	0	0
OS/2	1	0	1	0
Mainframe terminal	1	0	1	0

Source: INPUT

Notes:

- Windows use will increase overall, although one respondent expected use to decline
- All NC users who expressed an opinion on future use expected that their use of NCs would increase
- UNIX and Apple Macintosh use is expected to remain at the same level
- Use of X terminals, mainframe terminals, and OS/2 is expected to decrease

b. Intranet Builders

Of the 92% of Builders who named Windows-based PCs as Intranet clients, 78% (47 respondents) forecast how their use would change over the next two years. Of these 47 respondents, 72% believed PCs would increase in use and the remainder believed their use would stay the same.

Due to the small samples involved for the other types of client platform, it is not possible to measure accurately their expected change in use. For reference, however, the full figures are given in Exhibit III-4. The figures refer to numbers of respondents, not to percentages.

Exhibit III-4

Expected Change in Intranet Client Operating System Use Over Two Years (Intranet Builders)

Client Platform	No. who will use	Expect to increase	Expect to decrease	Expect to stay the same
MS Windows	46	26	0	10
Network Computer	10	8	0	0
Apple Macintosh	8	2	0	4
OS/2	8	0	4	3
UNIX	5	0	1	3
X terminal	5	0	1	1
Mainframe terminal	1	0	1	0

Source: INPUT

Notes:

- No respondents expected their use of Windows-based PCs for Intranet access to decrease
- All anticipated users of NCs who expressed an opinion on future use expected that their use of NCs would increase
- Apple Macintosh use is expected to increase or stay the same
- OS/2 use is expected to decrease or stay the same
- UNIX use appears to be expected to stay the same
- X and mainframe terminal use appears to be expected to decrease

B

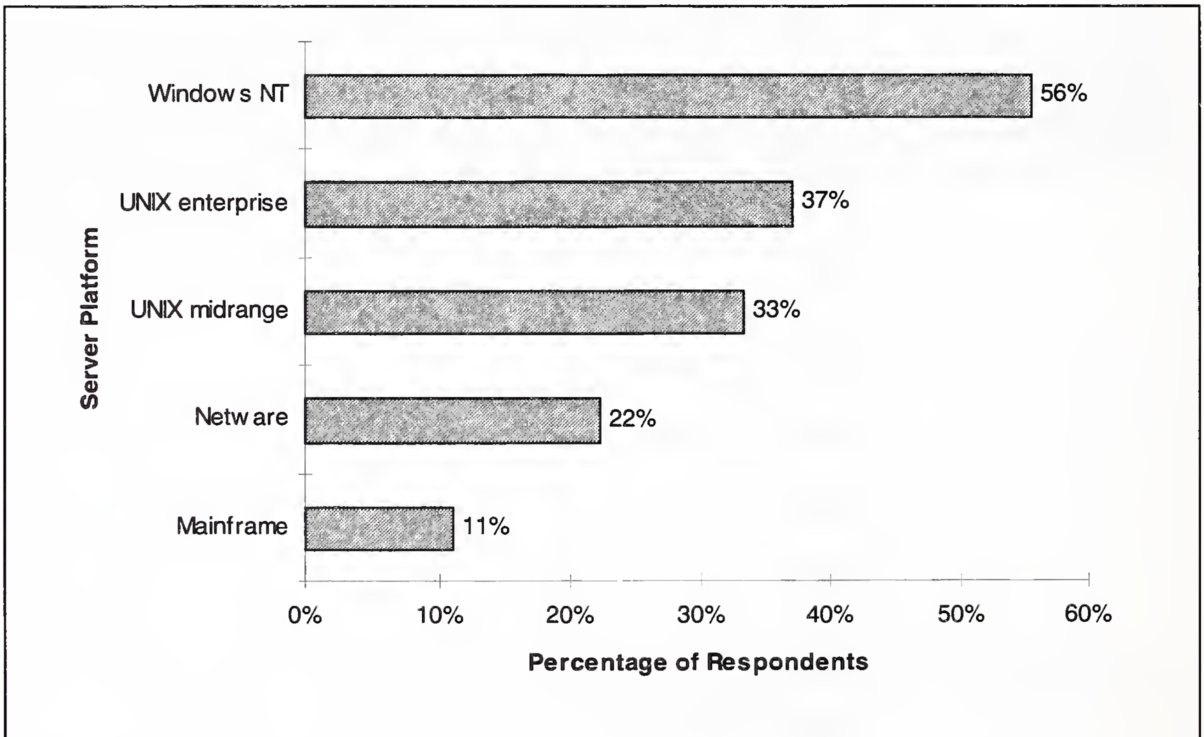
Server Operating Systems

1. Current Server Usage

Exhibit III-5 shows the server platforms on which Owners currently run their Intranet. Around half, 56%, use Windows NT, followed by midrange and enterprise UNIX systems (70% combined).

Exhibit III-5

Server Operating Systems Used to Run Intranet (Intranet Owners)

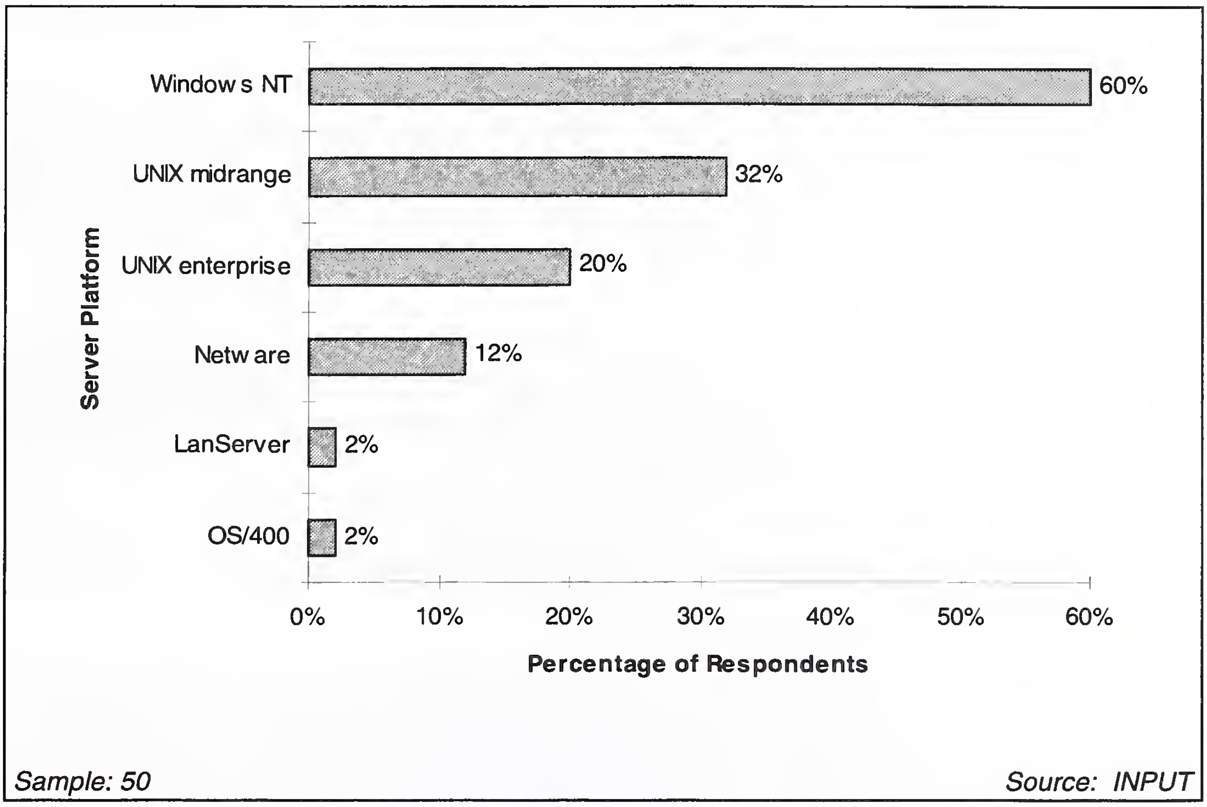


Sample: 27 *Source: INPUT*

Exhibit III-6 shows the server platforms on which Builders expect to run their Intranet. Over half, 60%, expect to use Windows NT, followed by midrange and enterprise UNIX systems (52% combined).

Exhibit III-6

Server Operating Systems to be Used to Run Intranet (Intranet Builders)



Sample: 50 *Source: INPUT*

The same pattern of operating system usage occurred with server as it did with client operating systems. Organisations who already had an Intranet were more UNIX-oriented than were organisations who were still in the process of building an Intranet. According to published surveys of public Internet Web servers, UNIX still dominates, although its share is falling. This indicates early Internet users tended towards UNIX, and this is reinforced by the finding here that organisations further down the Intranet development path tend to favour UNIX. Combining midrange and enterprise UNIX systems, UNIX is the most popular Intranet server platform among Owners, whereas Windows NT has a slight edge among Builders.

Over time, the profile of organisations with established Intranets will tend to the industry average, which will decrease the prevalence of UNIX on the server and increase that of Windows NT.

Novell Netware accounts for a much smaller share of Intranet server operating systems than is apparent in the overall market for LAN servers, where it has approximately 65% market share. INPUT believes this is due to the following reasons:

- Intranets are still commonly perceived as an extension to an existing network infrastructure and are still not often required to be wholly integrated into the corporate network. Users do not automatically, therefore, go to their LAN operating system supplier for their Intranet Web server.

- Novell has suffered from an image of follower, not leader in the Internet/Intranet market, and was late to market with a Web server solution (the company is addressing this situation with IntraNetware and Groupwise).

- Most Web servers will run on Netware, but as Novell's Web server is implemented as a Netware Loadable Module (NLM), it will run only on Netware, cutting off non-Netware sites from Novell's potential Web server customer base.

2. Expected Change in Server Usage

a. Intranet Owners

Due to the small samples involved for individual server platforms, it is not possible to measure accurately their expected change in use. For reference, however, the full figures are given in Exhibit III-7. The figures refer to numbers of respondents, not to percentages.

Exhibit III-7

Expected Change in Intranet Server Operating System Use Over Two Years (Intranet Owners)

Server Platform	No. who currently use	Expect to increase	Expect to decrease	Expect to stay the same
Windows NT	15	9	0	3
UNIX enterprise	10	6	1	2
UNIX midrange	9	7	1	0
Netware	6	0	0	1
Mainframe	3	0	3	0

Source: INPUT

Notes:

- UNIX is currently more popular than Windows NT and its use is expected to increase
- Windows NT use is expected to increase
- Netware use is expected to stay at the same level
- Mainframe use appears to be expected to decrease sharply (despite the very small sample size)

b. Intranet Builders

Due to the small samples involved for individual server platforms, it is not possible to measure accurately their expected change in use. For reference, however, the full figures are given in Exhibit III-8. The figures refer to numbers of respondents, not to percentages.

Exhibit III-8

Expected Change in Intranet Server Operating System Use Over Two Years (Intranet Builders)

Server Platform	No. who will use	Expect to increase	Expect to decrease	Expect to stay the same
Windows NT	30	19	0	1
UNIX midrange	16	6	2	3
UNIX enterprise	10	4	2	3
Netware	6	3	0	0
OS/400	1	0	0	0
LanServer	1	0	0	0

Source: INPUT

Notes:

- Windows NT is expected to increase its lead over the next two years
- UNIX is expected to increase in use, although less sharply
- Netware appears to be expected to increase in use as an Intranet platform

C

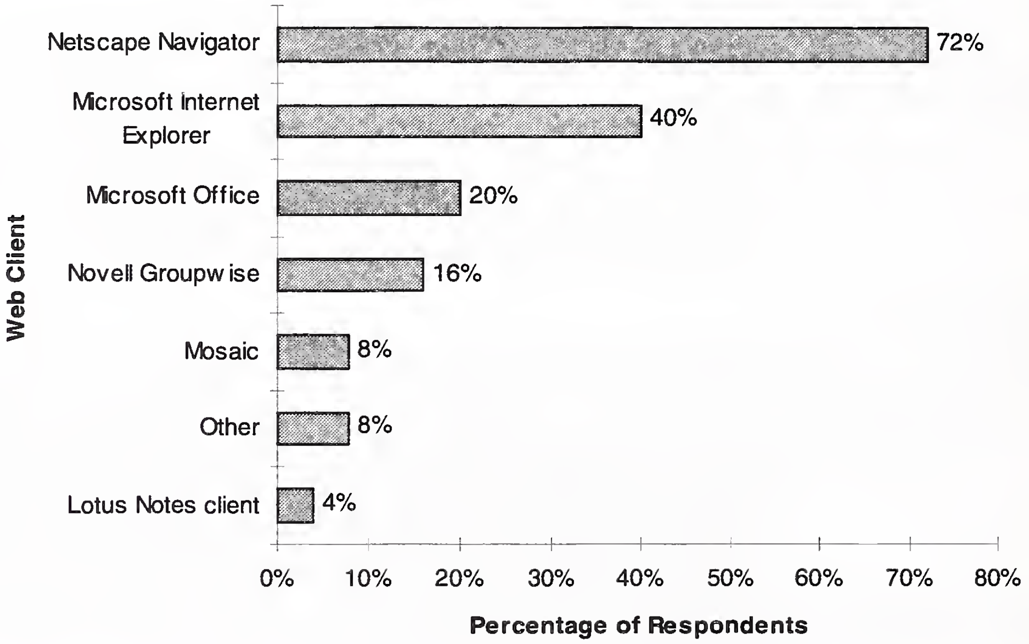
Intranet Platforms

1. Web Clients

Exhibits III-9 and III-10 show the Web clients used by Owners and Builders to access their Intranet.

Exhibit III-9

Web Clients Used for Intranet Access (Intranet Owners)

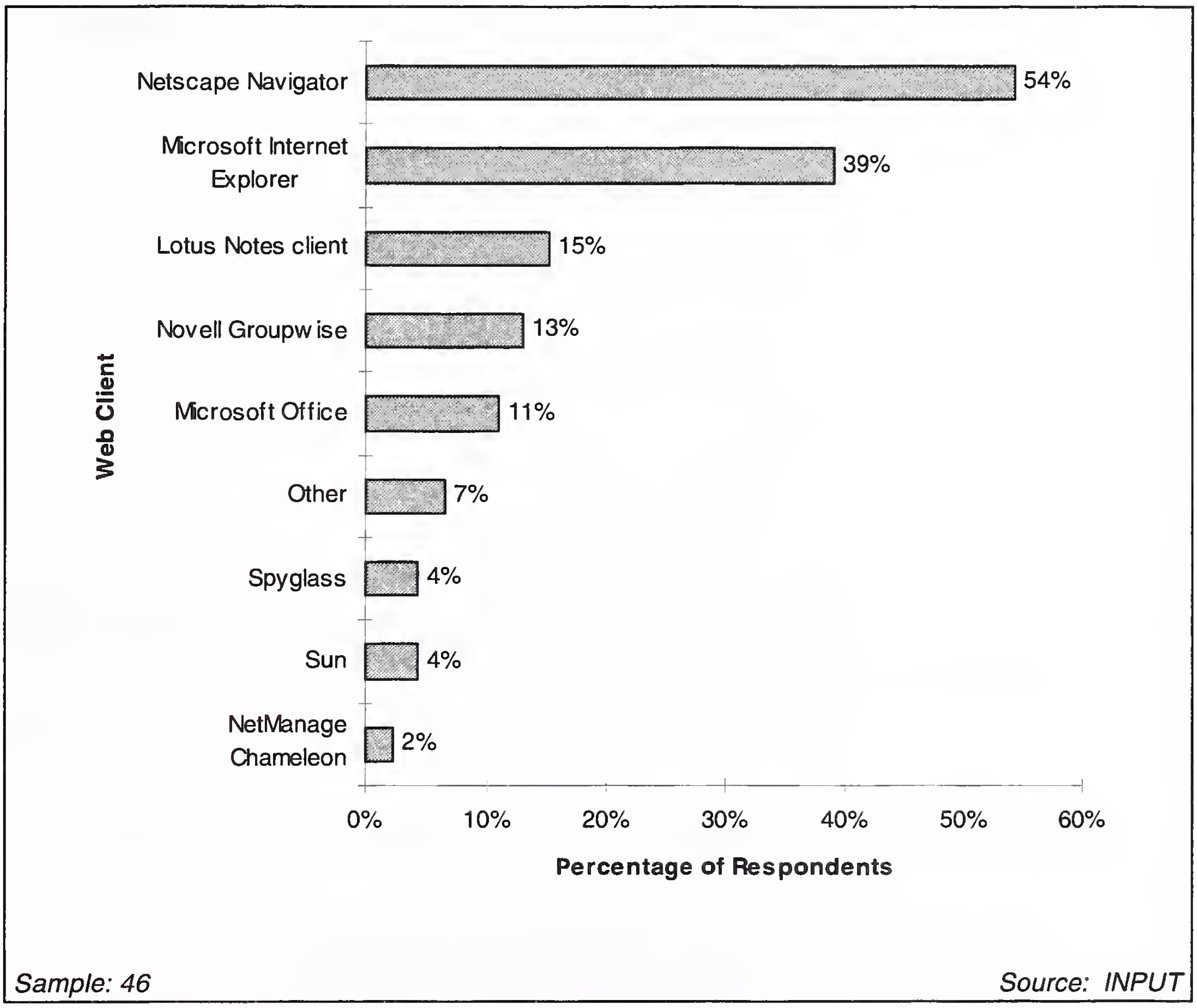


Sample: 25

Source: INPUT

Exhibit III-10

Web Clients to be Used for Intranet Access (Intranet Builders)



Sample: 46 *Source: INPUT*

Netscape Navigator remains the most popular Web client for Intranet as well as for Internet access. The breakdown of Netscape and Microsoft Web clients among Owners is similar to the breakdown around one year ago of Web browsers for general Internet access. The breakdown among Builders is closer to the current Netscape/Microsoft split of Web browsers for general Internet access.

Two Owners used an "Other" Web client: one organisation used an self-developed front-end and the other used the Citrix ICA client. (Citrix' ICA is a client-side, presentation-level protocol that splits processing between client (presentation logic) and server (application logic), so reducing client requirements.)

Reasons given by Owners for their choice of Web client were:

- Netscape
  - "Don't want Microsoft, only because it is Microsoft"
- Microsoft
  - "Most desktop software is Microsoft"
  - "Bundled with new operating system"
  - "Company standard"
- Lotus
  - "Already using Lotus Notes for groupware"

Three Builders will use an "Other" Web client: one did not express a preference, one currently uses Netscape Navigator but was unsure of future usage, and one expected to use Citrix ICA.

Reasons given by Builders for their choice of Web client included:

- Netscape
  - "Use it for Internet access"
  - "It was considered to be the best"
  - "Better product"
  - "Free to us"
  - "Most popular; sets the standards"
  - "Is market leader"
- Microsoft
  - "It is free"
  - "Standardising on Windows 95"
  - "Very familiar with Microsoft; is bundled into other software"
  - "Already using it"

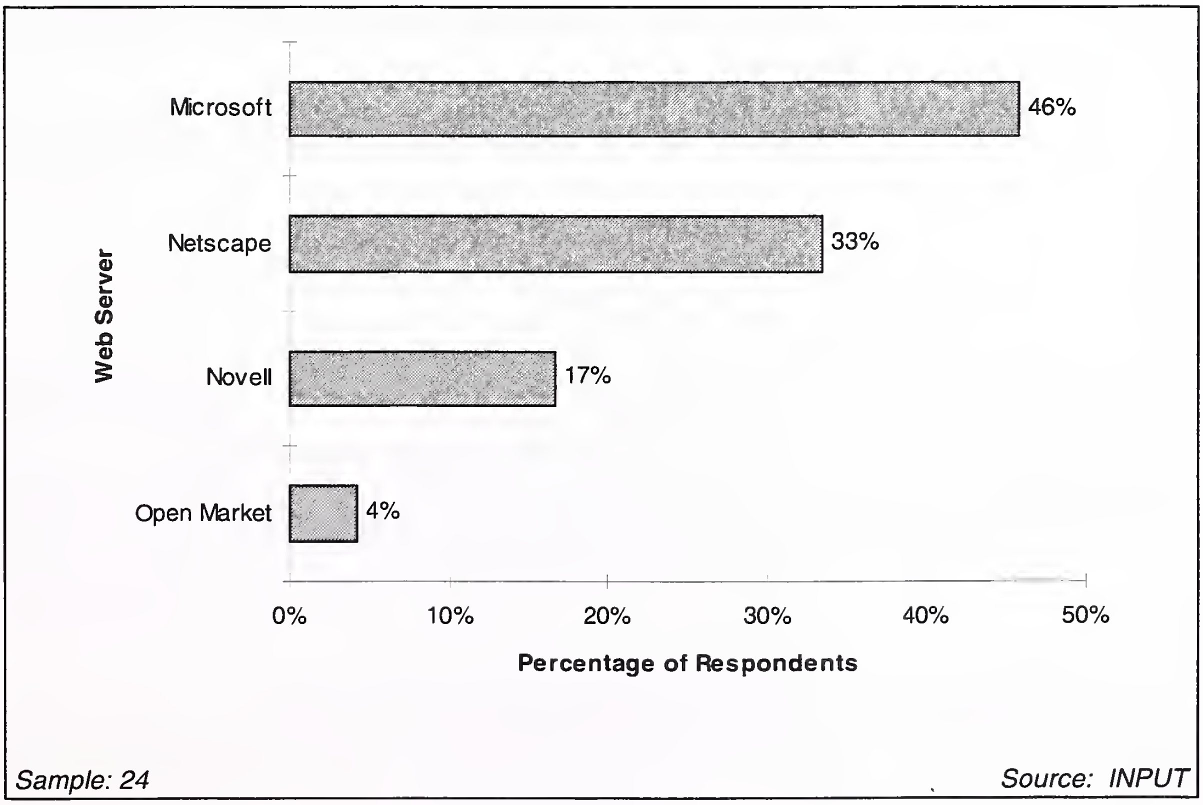
- Lotus
  - – "Already writing applications in Lotus Notes"
  - – "Workflow strategy"
- Novell
  - – "Large Novell structure in place"
  - – "Is the corporate standard"
- Sun
  - – "Sun has a big influence, i.e. Java"

2. Web Servers

Exhibits III-11 and III-12 show the Web servers used by Owners and Builders to run their Intranet.

Exhibit III-11

Web Servers Used to Run Intranet (Intranet Owners)

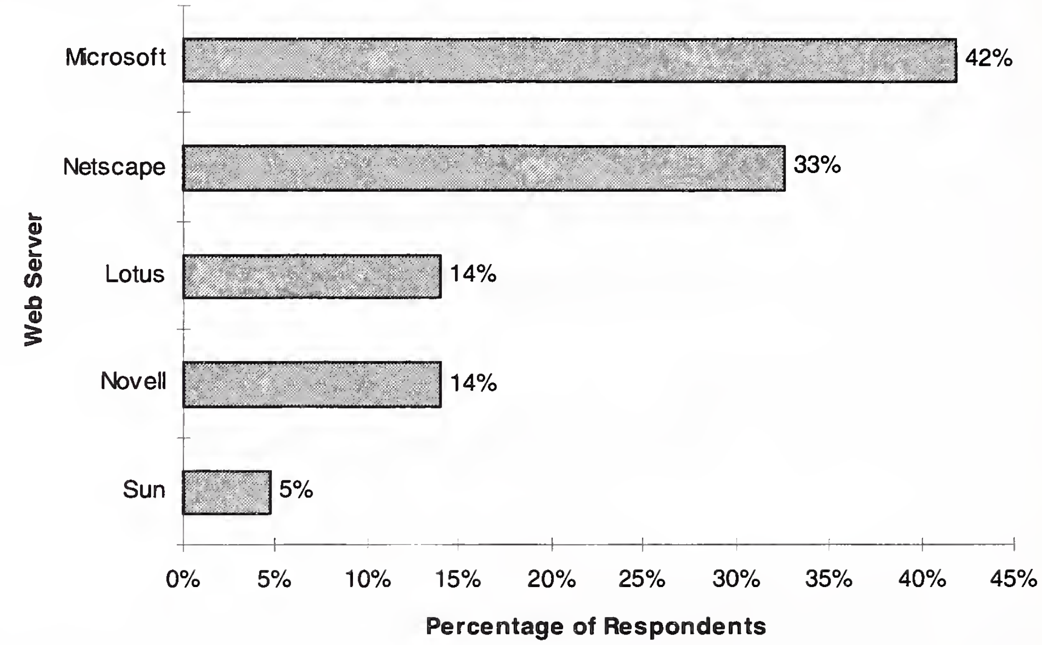


Sample: 24

Source: INPUT

Exhibit III-12

Web Servers to be Used to Run Intranet (Intranet Builders)



Sample: 43 *Source: INPUT*

In both cases, Microsoft's Web server (IIS—Internet Information Server) is the most popular. The comments submitted by respondents are recorded verbatim below, and illustrate the ubiquity Microsoft's products have achieved.

Reasons given by Owners for their choice of Web server included:

- Microsoft:
  - "It is dominant"
  - "Bundled into the package"
  - "We use Microsoft Access as our database"
  - "We have a Windows NT policy"
- Netscape:
  - "Better functionality, easier to use"

Reasons given by Builders for their choice of Web server included:

- Microsoft:

  - "Everything is going Microsoft"
  - "All office systems are now Microsoft"
  - "Everything is Microsoft"
  - "Everything is Microsoft-based"
  - "Microsoft is dominant"
  - "Derivative of NT Exchange"
  - "All our non-AS/400 applications are moving to NT"
  - "We standardise on Microsoft PC applications"

- Netscape:
  - "Most popular; sets the standards"
- Novell:
  - "Large Novell structure in place"
  - "Is the corporate standard"
- Lotus:
  - "Group strategy on Domino"
- Sun:
  - "Impressed with other Sun technology"

D

Intranet Application Clients

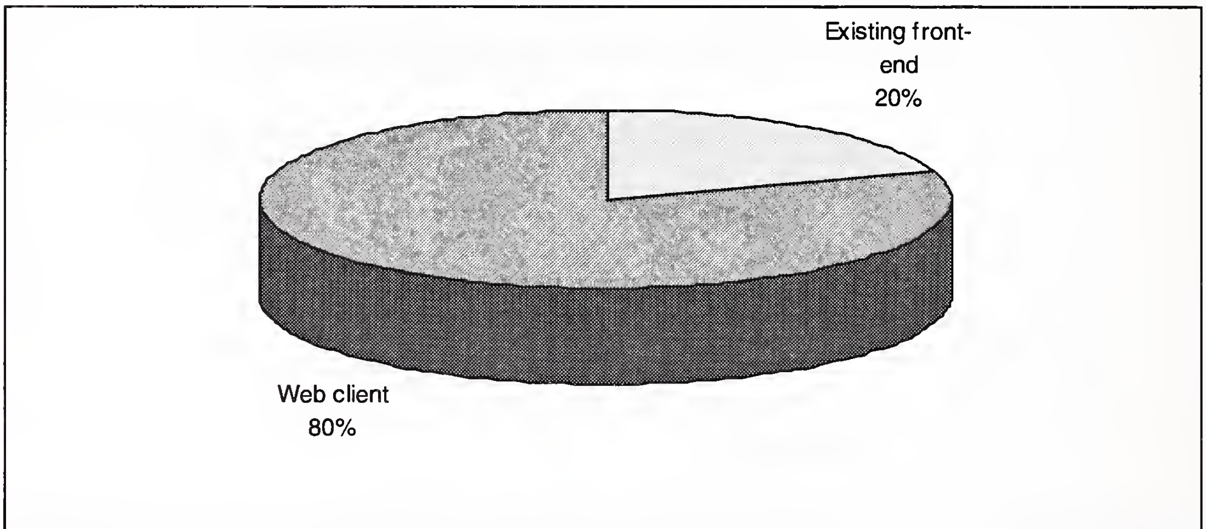
Exhibits III-13, III-14 and III-15 show the proportion of Intranet applications that are or will be accessed by an existing front-end and the proportion accessed by a Web client for Intranet Owners, Builders and Evaluators respectively.

In all cases, most Intranet applications are currently, or are expected to be accessed by a Web client as opposed to a product-specific, proprietary, or in-house-written front-end.

This accords with the reasons many organisations have for implementing Intranets, which include ease of access to all types of information, and standardisation of platforms. By accessing applications within the Web client, the maximum number of employees is able to use those applications.

Exhibit III-13

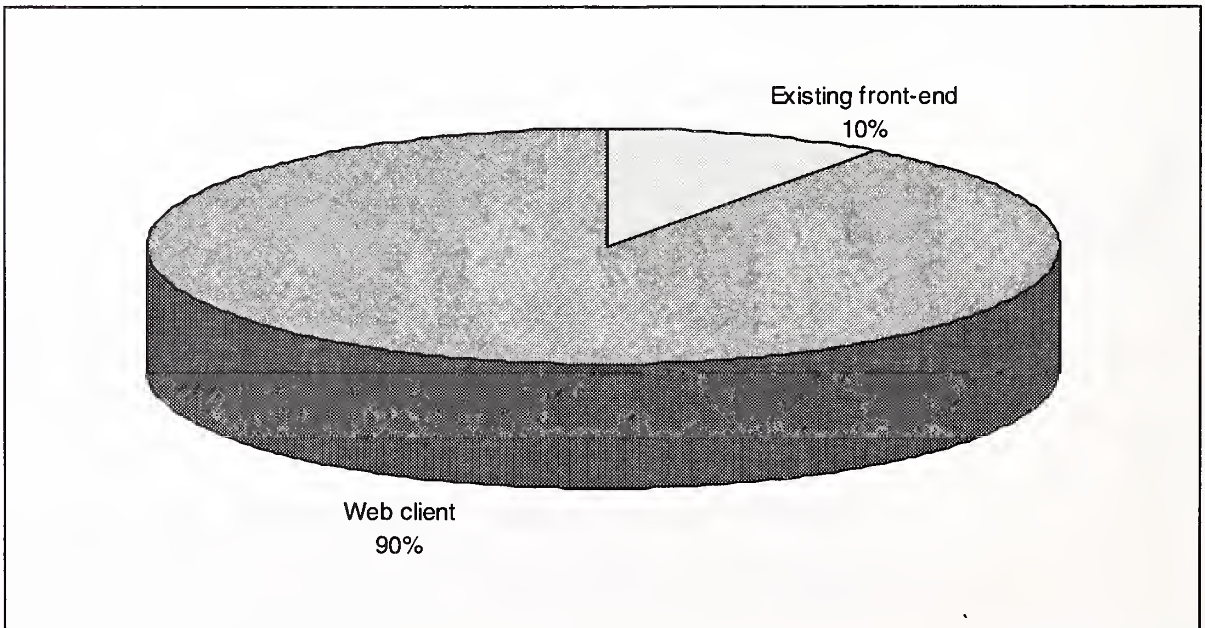
Type of Client Used to Access Intranet Applications (Intranet Owners)



Sample: 51 applications mentioned *Source: INPUT*

Exhibit III-14

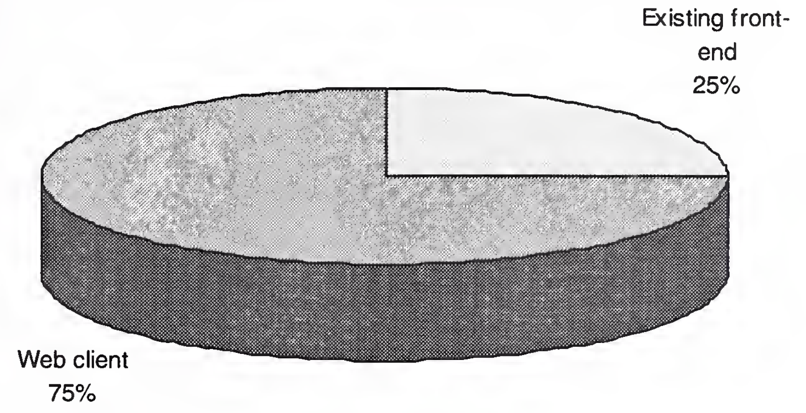
Type of Client to be Used to Access Intranet Applications (Intranet Builders)



Sample: 89 applications mentioned *Source: INPUT*

Exhibit III-15

Type of Client to be Used to Access Intranet Applications (Intranet Evaluators)



Sample: 207 applications mentioned *Source: INPUT*

(Blank)

IV

Motives for Intranet Development

A

Reasons For Building an Intranet

Among all categories of respondent, the three most common reasons for embarking on Intranet development are (in descending order):

1. "Ease of access to all types of information". This potential benefit was among the first to be identified when Intranets entered the public eye in 1995, and is by far the most significant driver of Intranet development. Through the use of a consistent data and network environment, users expect to ease the process of unlocking corporate data.

2. "Uniformity / standardisation of platforms". A popular belief is that users face increasing difficulties in managing disparate systems, the variety of which increases with each successive wave of IT development. Intranets are seen as a way of reducing management overhead by reducing the variety of, for example, network and database architectures.

3. "Enabling access to / from the outside world". A significant benefit of Intranets, and evidently a driver for their development, is the standardisation of internal and external network environments. The adoption of the same network architecture and data formats internally as are used on the external Internet can only ease, not complicate, communication to and from the outside world. Taken to its logical conclusion, accessing data, applications and objects is reduced to a matter of knowing their location, beit within or without the organisation.

1. Ease of Access to All Types of Information

By far the most common reason for building an Intranet is the ease of access to all types of information that an Intranet can deliver. Ease of access to information is made possible by the following Intranet features:

- Consistent interface—most or all information stored on an Intranet is accessed and viewed using a Web browser. As the client, and therefore the user interface, stays the same, users do not have to alternate between, for example, word processor, spreadsheet, and presentation applications to view information.

- Ease of navigation:

  - Hyperlinks—the most notable feature of the Web is its hyperlinked structure. Unlike earlier Internet navigation systems, such as the menu-based gopher, links can be created between sets of information in a structured or unstructured way as desired. The relationships between data on an Intranet can be hierarchical, flat, contextual or even serendipitous. Given the flexibility of structure, therefore, it is critical that Intranet design is kept consistent and appropriate.

  - Search engines—the quickest way to locate a piece of information can often be a flat-text search of the contents of an entire site or a subset of a site, using multiple search terms and Boolean connectors. Many Internet search engines are available for use on Intranets, such as AltaVista, Open Text and Excite and can be configured to recognise and index a wide range of data formats.

  - Bookmarks—all popular Web browsers support bookmarking of frequently visited pages and sites. By default, bookmarks are stored on the client and are specific to each user. In addition, a company-wide bookmark list can be stored and managed centrally, and accessed like any other Intranet Web page.

  - Emerging technology: agents and server push—new technology such as intelligent agents and server push enable information to be located and presented to the user reactively (as far as the user is concerned), as opposed to the proactive effort required with manual navigation and searching. Using agents (for example, Autonomy) or server push (for example, Pointcast), some of the effort of navigation can be offloaded and set to work in the background.

- Platform independence—using the Internet/Intranet standards and protocols (such as HTTP and HTML), users should not be concerned about, or even aware of, the platform on which the data they require is stored, beit mainframe or departmental server, big- or little-endian architecture, UNIX or Windows NT operating system. Similarly, the user should be able to access and view Intranet data regardless of client platform, for example: Windows PC, UNIX workstation or Network Computer.

This last feature, platform independence, is related strongly to the second most common reason for Intranet implementation, uniformity / standardisation of platforms.

2. Uniformity of Platforms

Ease of access to information is made possible by Intranets due to their platform independence. In this context, "platform" refers both to hardware or operating system and to the environment in which data is stored and accessed and, ultimately, applications are deployed and executed.

Data stored on disparate systems can be stored on one Intranet Web server or cluster of servers, or equally, those disparate systems can be turned into Intranet Web servers. Low-cost Web server software is available for most mainstream platforms, from PC to mainframe, and its availability is increasing.

In many instances, users will be able to choose whether to retain existing investment in centralised and departmental systems by running a Web server on them, or take the opportunity to replace such systems with more up-to-date and/or cost-efficient servers dedicated to Intranet applications. In both cases, a homogeneous, yet 'open' platform is created.

3. Enabling Access To and From Outside World

An Intranet is, by definition, a private Internet, using much of the same architecture and technology. There is no major technological barrier, therefore, between the internal Intranet and external Internet. In terms of data formats and access methods, communication between the two is seamless. Features which are common include:

- IP addressing—every Internet host is referenced by an IP address. Similarly, Intranet clients and servers are referenced either directly by an IP address or indirectly through mapping. For security reasons, firewalls are often the only IP-addressable device visible from outside the organisation.

- Email—the same email transport mechanisms and encoding schemes (such as SMTP, POP3, uuencode and MIME) are used on an Intranet as on the Internet, or are converted by a gateway. The same client application can be used for internal and external mail, for example: Qualcomm Eudora or Microsoft MS Mail.

- User interface—a Web client is the standard interface to content stored on the Internet or Intranet; users can alternate between internally- and externally-stored pages without reconfiguration.

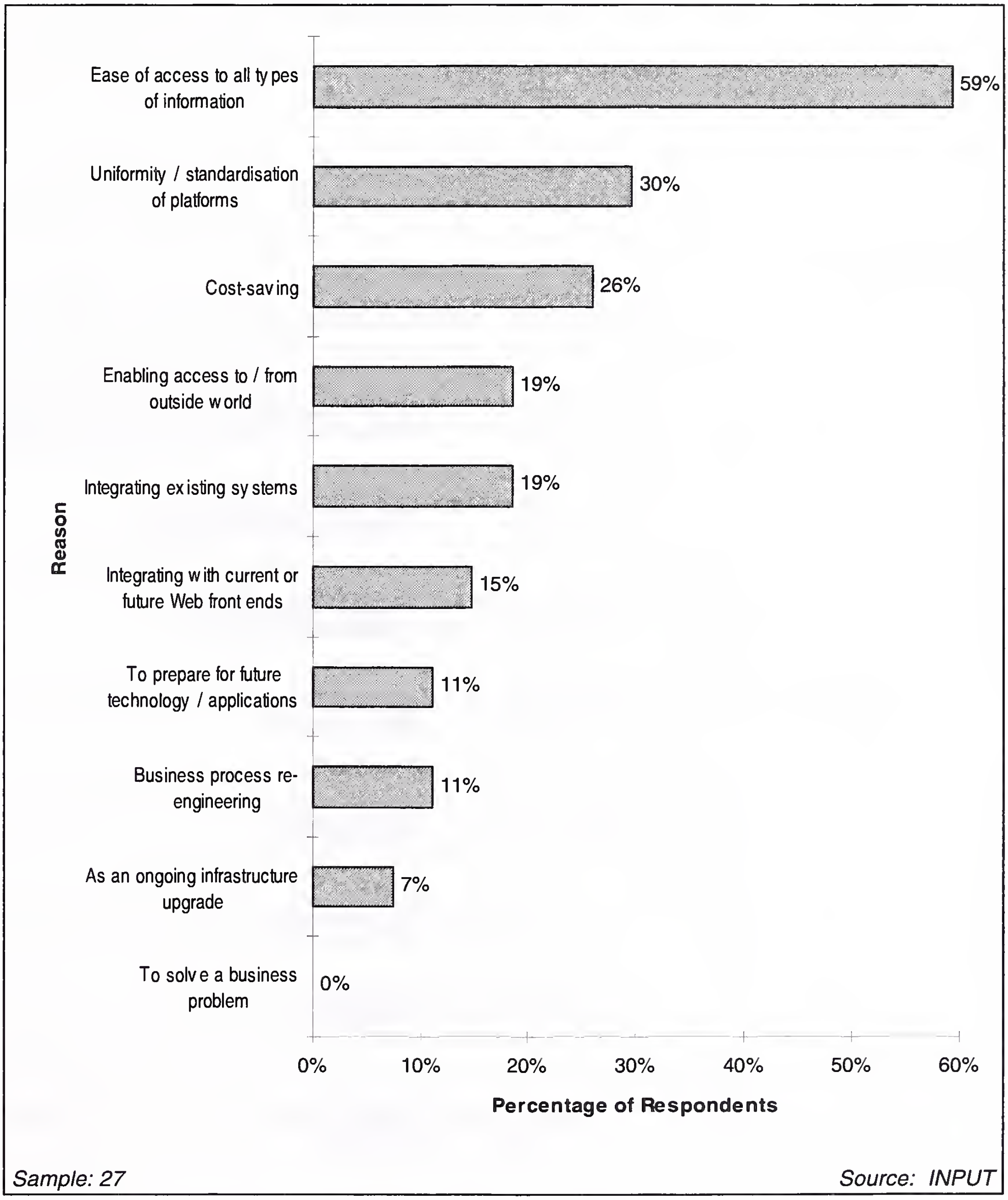
- Data storage—HTML is the standard method of presenting Internet and Intranet data, but may be generated in a variety of ways, for example: manual document markup, automatic conversion from existing office applications, dynamic generation from databases and dynamic generation from server-based scripts. In addition, object storage will become a commonplace using such standards as IIOP, common to both Internet and Intranet.

4. Intranet Owners

Exhibit IV-1 shows Intranet Owners' reasons for building an Intranet.

Exhibit IV-1

Reasons for Building an Intranet (Intranet Owners)



Sample: 27 *Source: INPUT*

"Other" reasons given by Owners for building an Intranet were:

- Corporate group strategy (stated by two respondents)
- Geographic spread
- Email

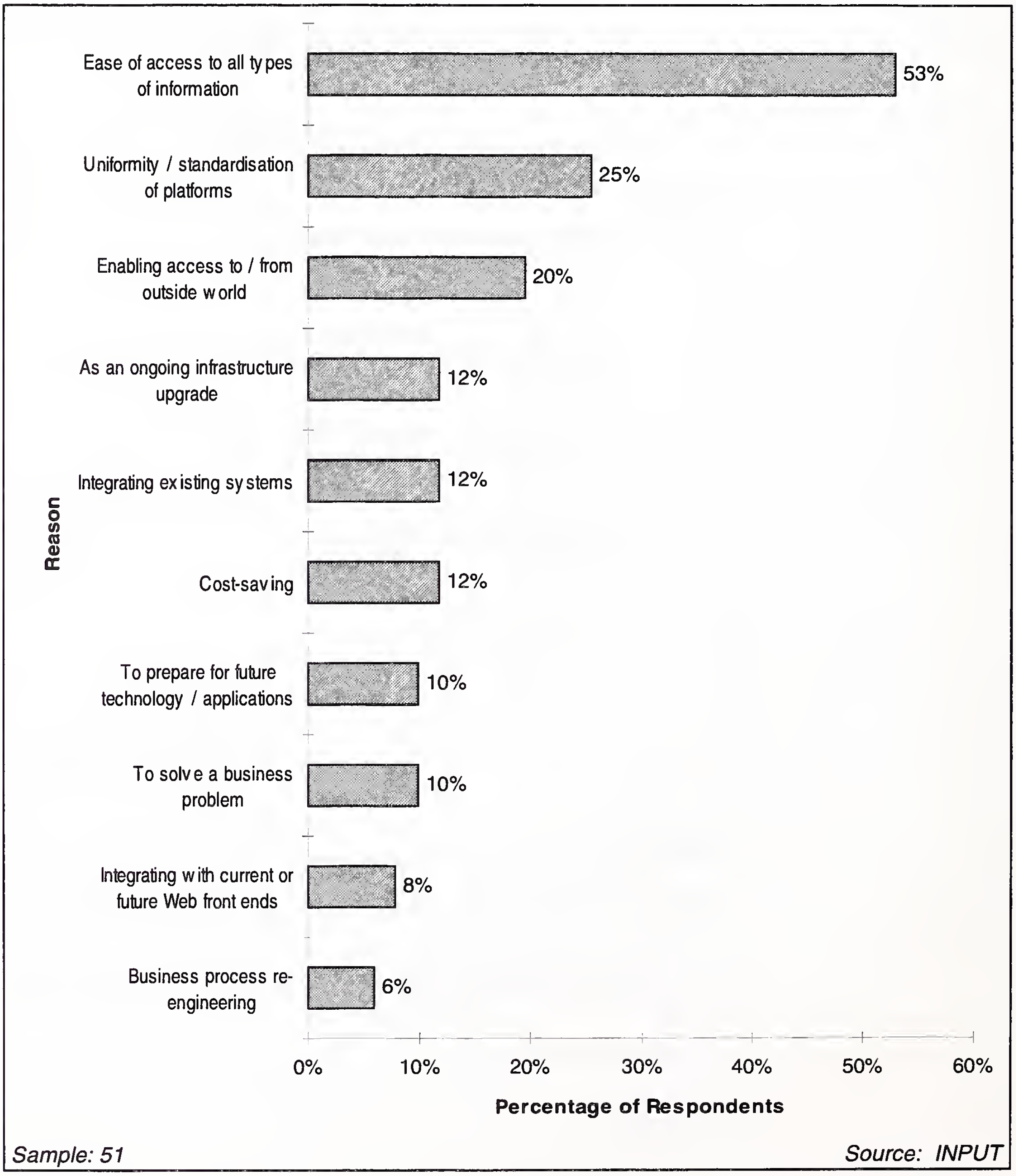
- Extranet for suppliers
- Productivity and efficiency gains
- Improvement of data flow

5. Intranet Builders

Exhibit IV-2 shows Intranet Builders' reasons for building an Intranet.

Exhibit IV-2

Reasons for Building an Intranet (Intranet Builders)



Sample: 51 Source: INPUT

Five respondents gave “to solve a business problem” as a reason. The problems they mentioned were:

- Productivity gains
- Fragmentation of corporate information
- Electronics standards updating
- To provide consistent method of storing and accessing data on a worldwide basis
- Logistics, central warehouse inventory

“Other” reasons given by Builders for developing an Intranet were:

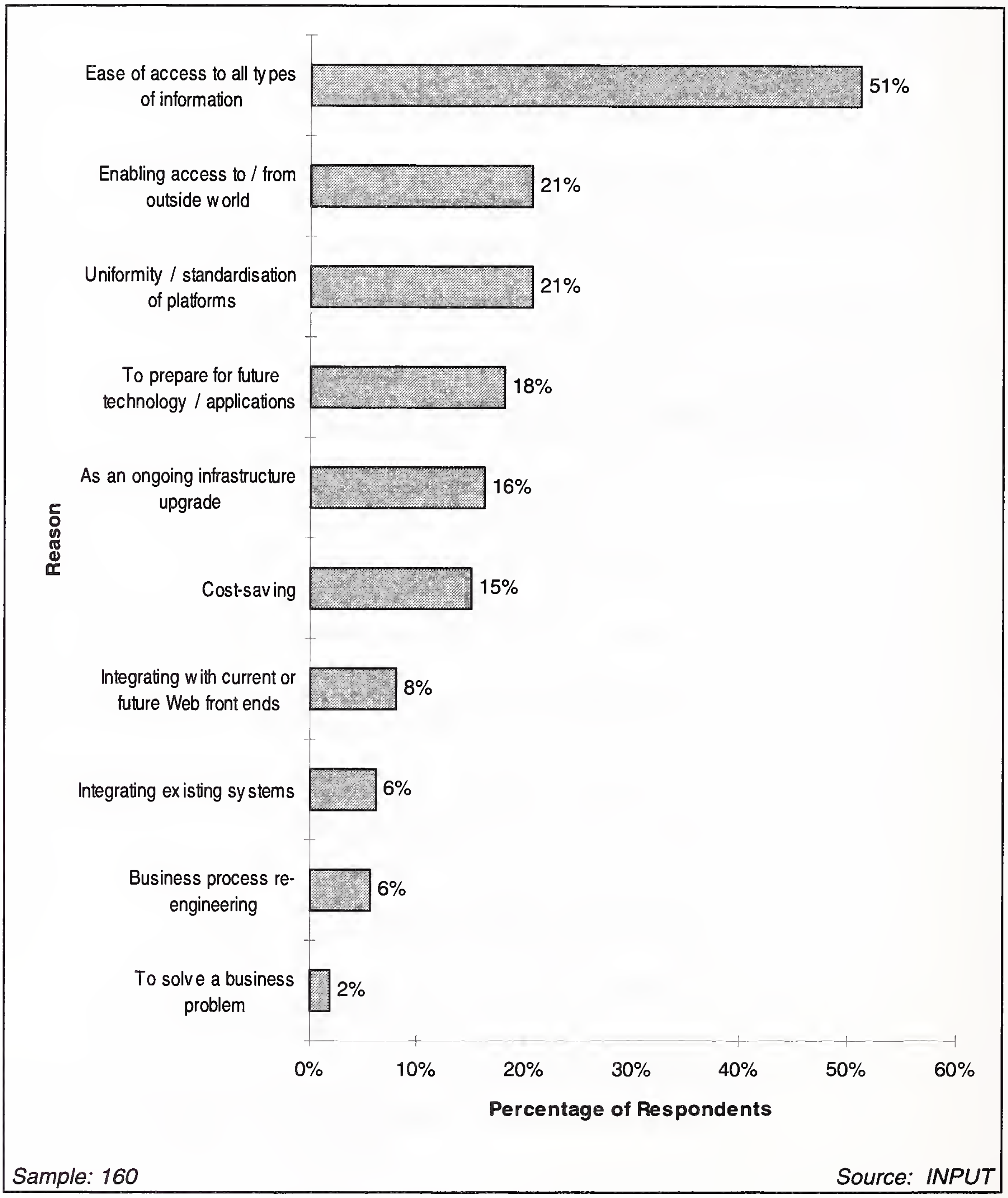
- Competitive pressure (stated by two respondents)
- Corporate group strategy (stated by two respondents)
- Connectivity on a global scale (stated by two respondents)
- Unification of disparate email systems (stated by two respondents)
- Simplified support issues (stated by two respondents)
- Lotus Notes application building
- Customer requirements
- Productivity and quality improvements

6. Intranet Evaluators

Exhibit IV-3 shows Intranet Evaluators’ reasons for building an Intranet.

Exhibit IV-3

Reasons for Building an Intranet (Intranet Evaluators)



Sample: 160 *Source: INPUT*

Three respondents gave “to solve a business problem” as a reason. The problems they mentioned were:

- Supply of product and project information
- Management Requirement Planning
- Sales force mobility

The following "other" reasons were each given by multiple respondents:

- Corporate group strategy (stated by five respondents)
- Extranet access with customers and/or suppliers (stated by five respondents)
- Replacement of paper-based systems (stated by five respondents)
- Email (stated by five respondents)
- Corporate imperative to evaluate "in-vogue" technology (stated by three respondents)
- Provide access to common datawarehouse (stated by two respondents)

The following "other" reasons were each given by one respondent:

- Advanced messaging
- Replace existing email and internal messaging system
- Major drive from US customers
- Transaction processing
- Flexibility of information presentation
- Exposure to the marketplace
- Market forces
- Competitive pressure
- To complement Lotus Notes development

7. By Industry

Exhibits IV-5 to IV-11 show the reasons for developing or considering an Intranet by industry sector. The figures presented for each industry are those of the categories pre-defined in the survey questionnaire and do not include "Other" responses.

There is relatively little variation between the industries in their reasons for considering or building an Intranet. Deviations from the average are shown for each industry in Exhibit IV-4.

Exhibit IV-4

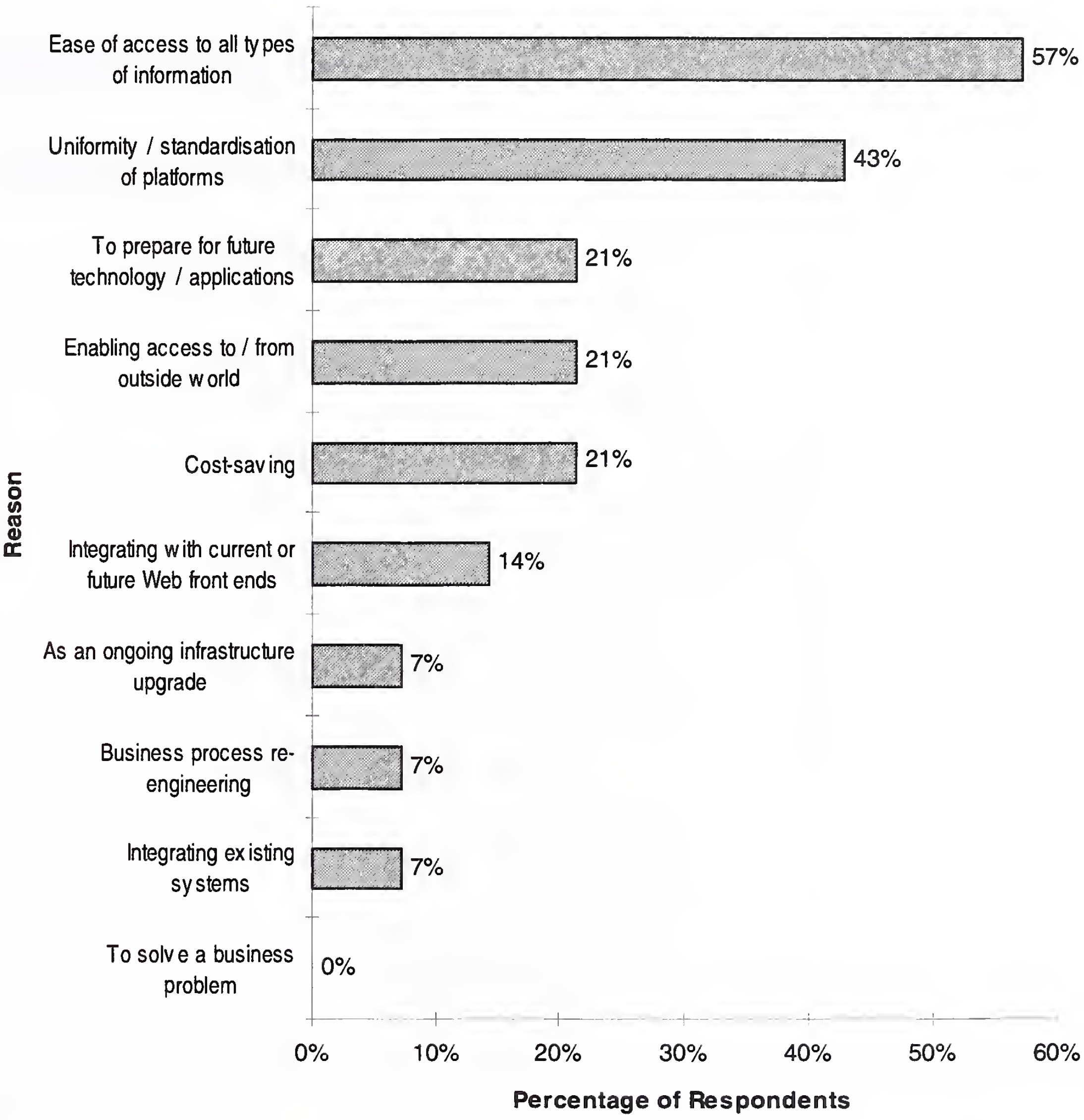
Greater and Lesser Reasons for Building or Considering an Intranet (by Industry)

Industry Sector	Greater Reasons	Lesser Reasons
Banking and finance	Uniformity / standardisation of platforms	—
Discrete manufacturing	—	—
Government	Ease of access to all types of information	To prepare for future technology / applications
Insurance	Cost-saving	—
Process manufacturing	—	—
Retail	—	Ease of access to all types of information
Services	—	—

Source: INPUT

Exhibit IV-5

Reasons for Building or Considering an Intranet (Banking and Finance)

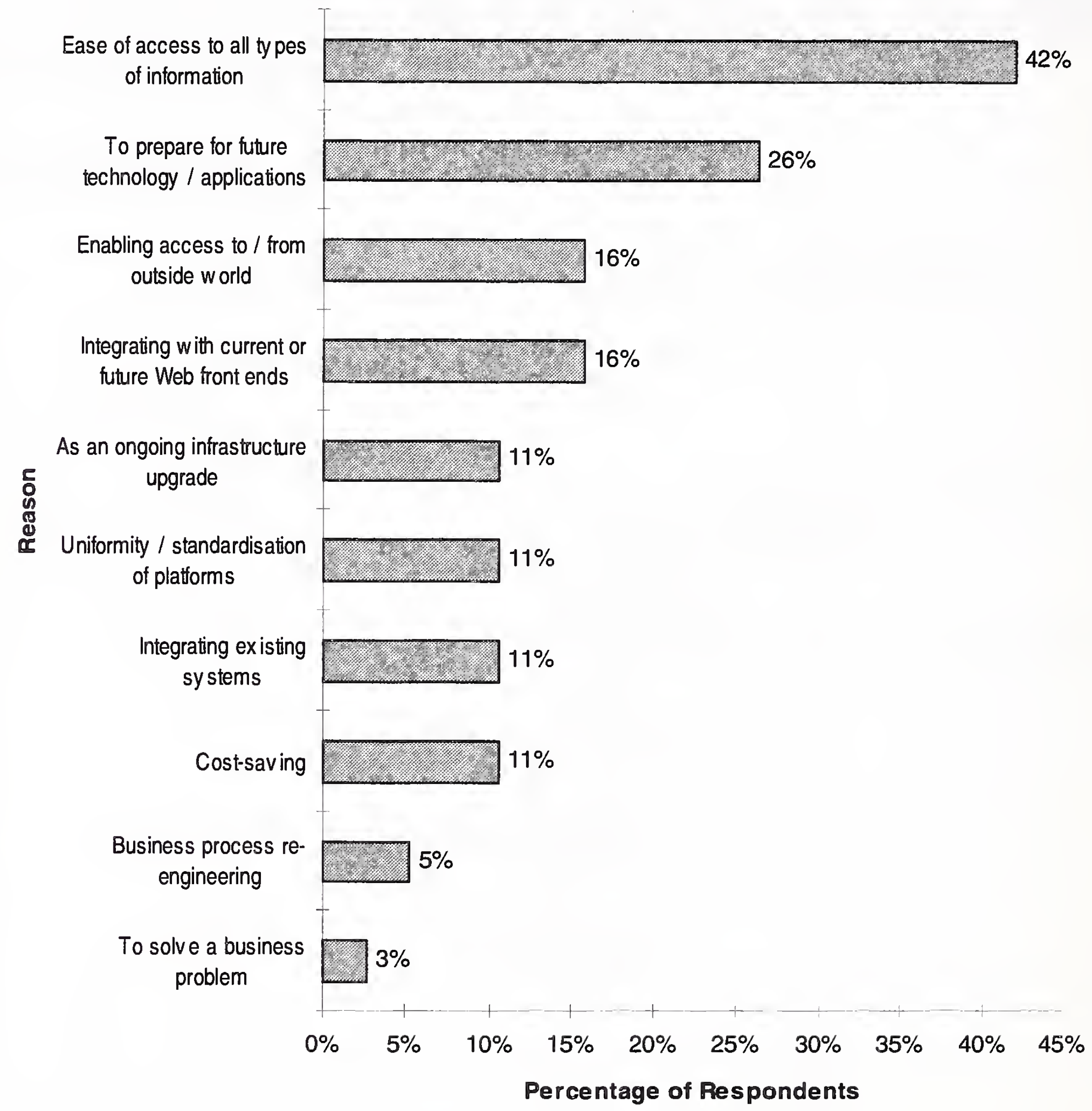


Sample: 14

Source: INPUT

Exhibit IV-6

Reasons for Building or Considering an Intranet (Discrete Manufacturing)

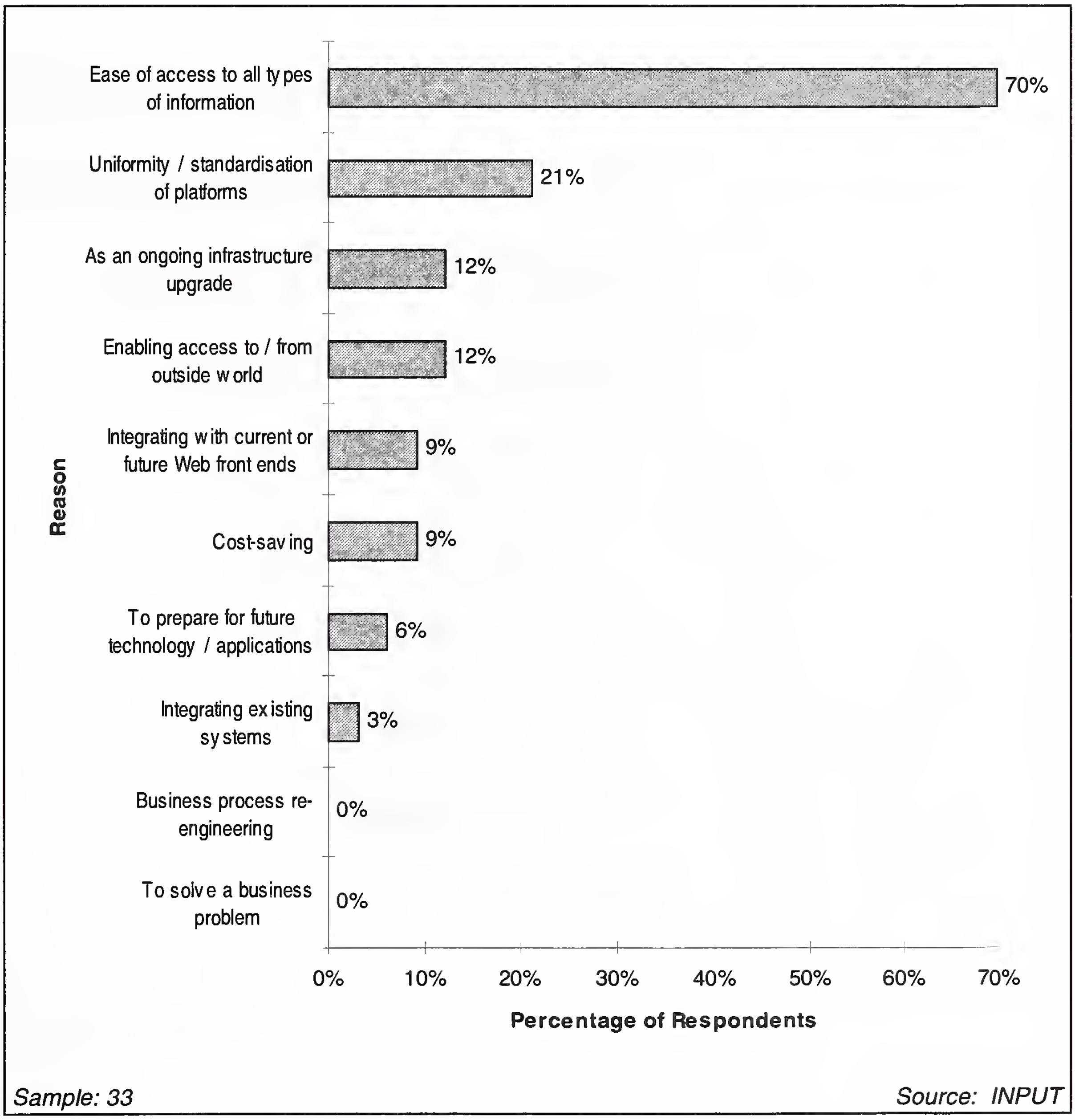


Sample: 38

Source: INPUT

Exhibit IV-7

Reasons for Building or Considering an Intranet (Government)

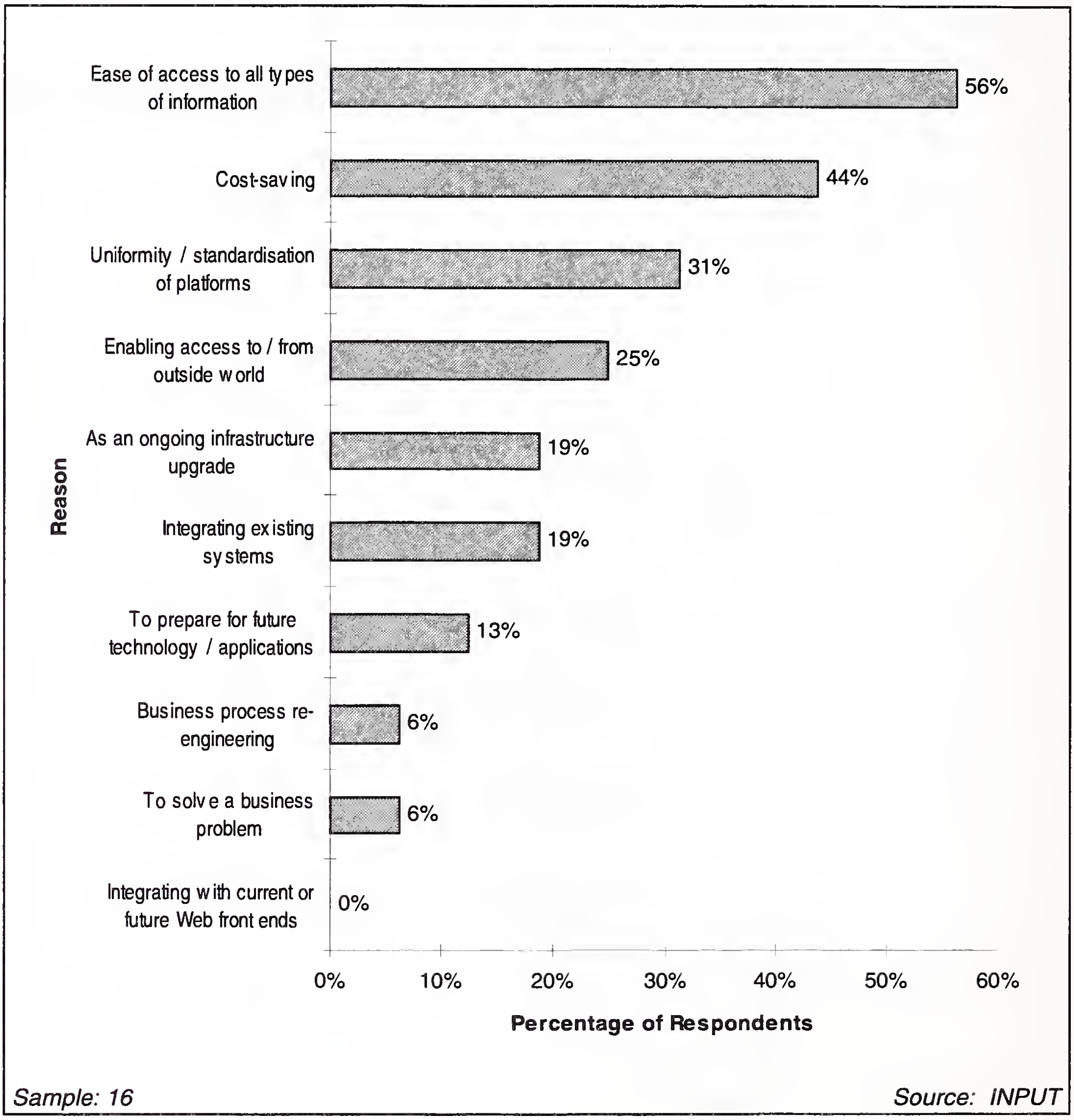


Sample: 33

Source: INPUT

Exhibit IV-8

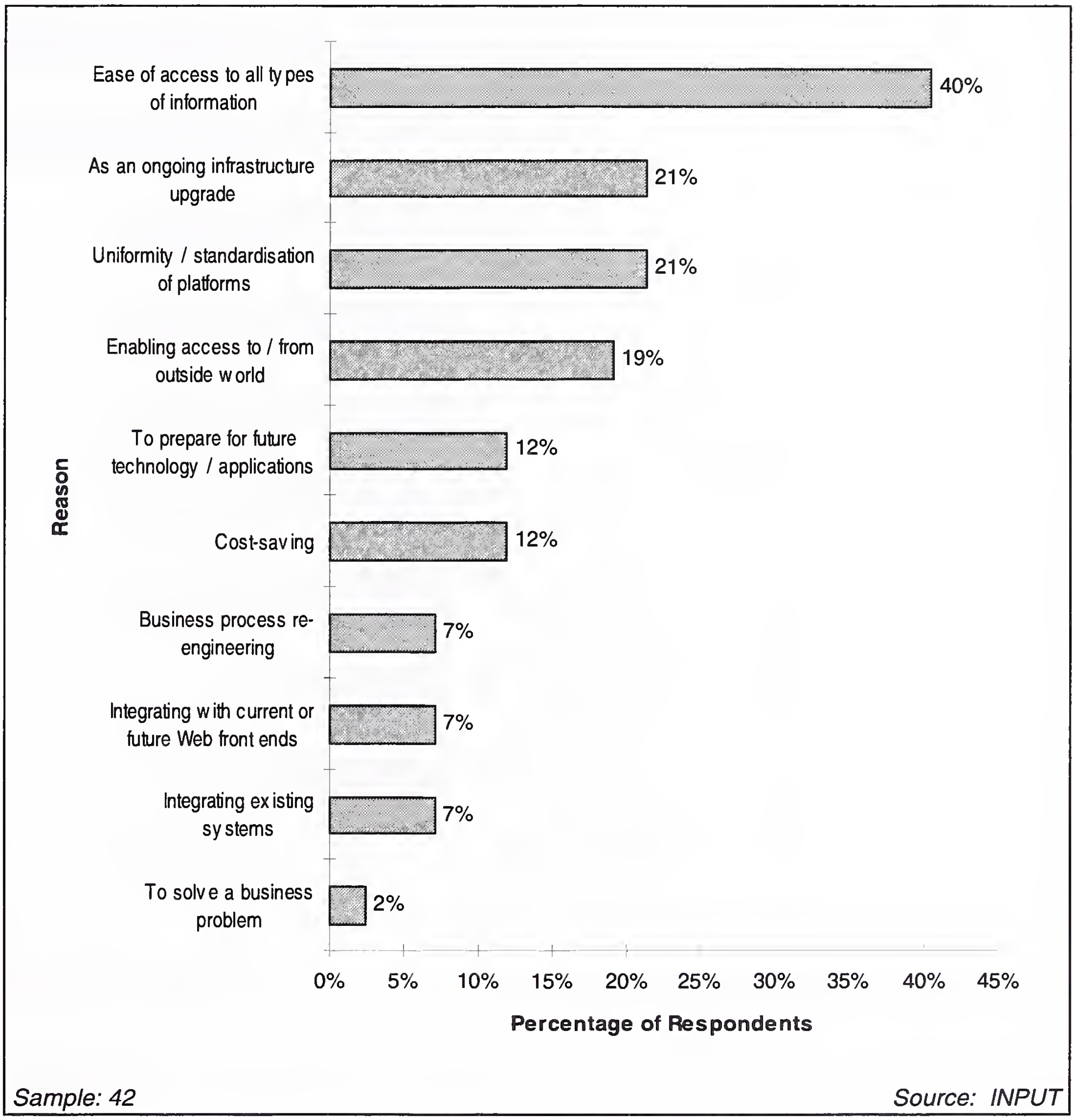
Reasons for Building or Considering an Intranet (Insurance)



Sample: 16 *Source: INPUT*

Exhibit IV-9

Reasons for Building or Considering an Intranet (Process Manufacturing)

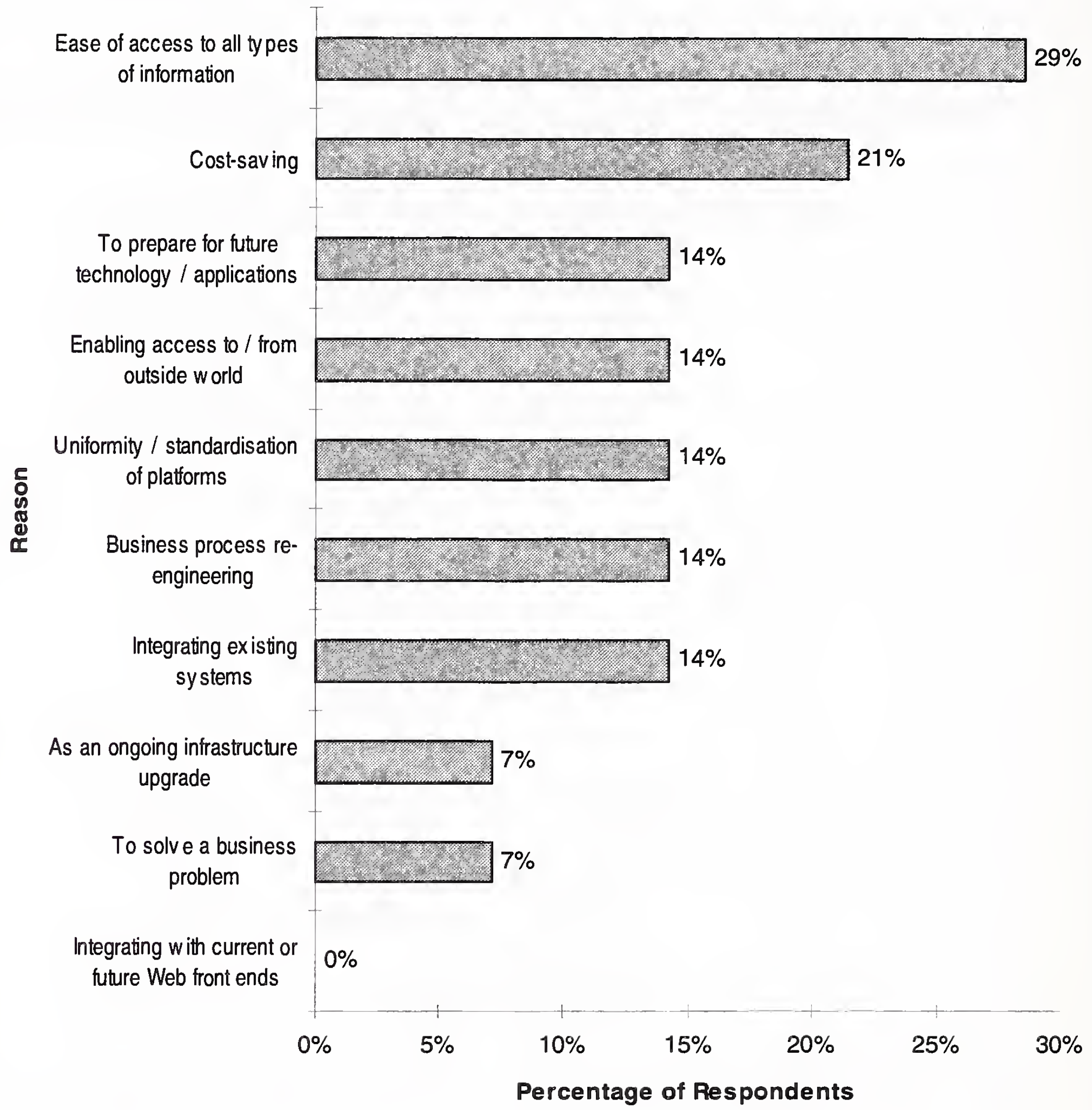


Sample: 42

Source: INPUT

Exhibit IV-10

Reasons for Building or Considering an Intranet (Retail)

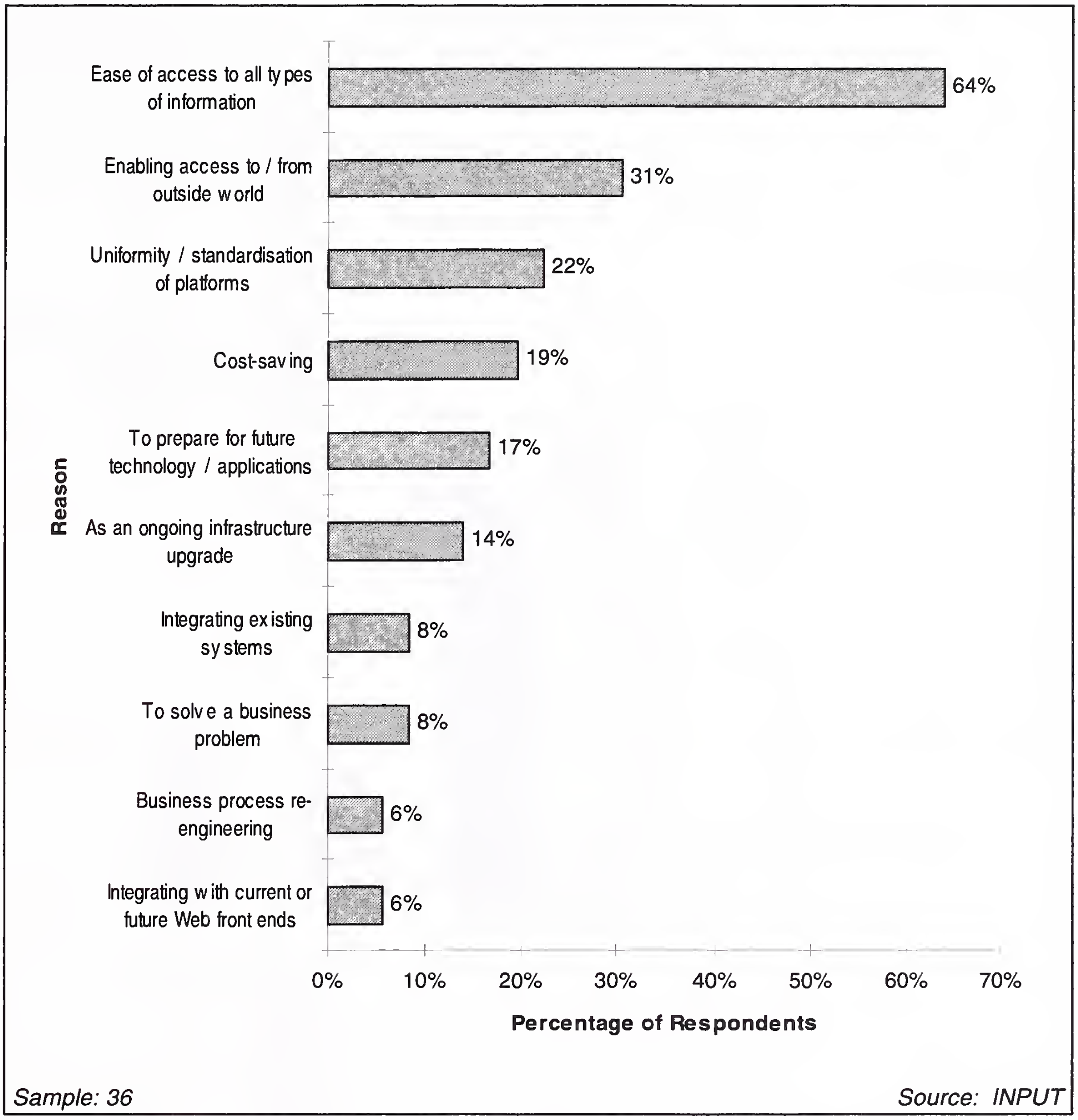


Sample: 14

Source: INPUT

Exhibit IV-11

Reasons for Building or Considering an Intranet (Services)



Sample: 36

Source: INPUT

B

Influence of Year 2000 on Intranet Development

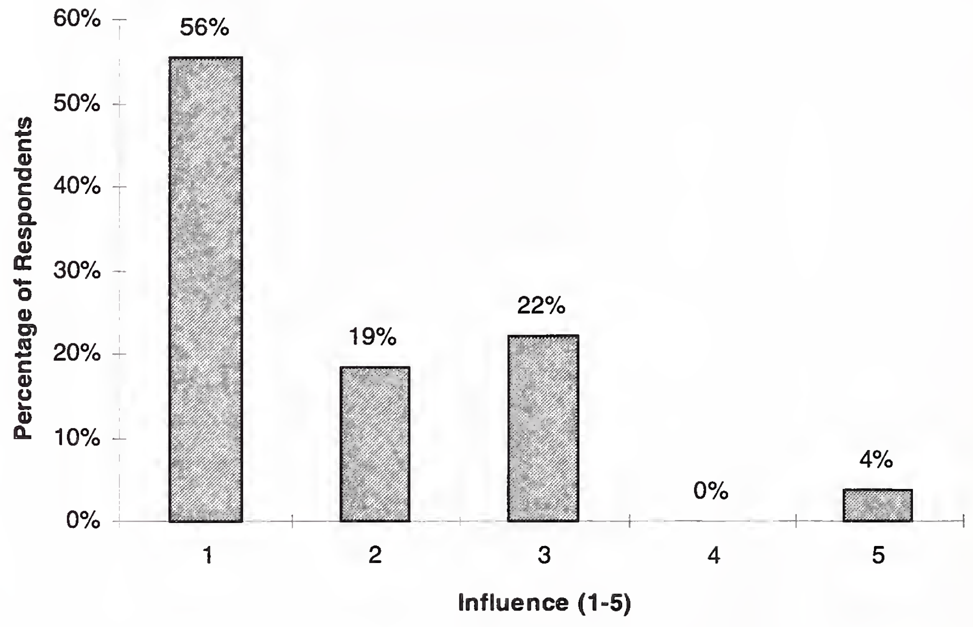
1. By Current Intranet Status

It has been widely suggested that Intranets may, at least partially, solve the Year 2000 problem (Y2K). Given the now-urgent need to address Y2K, it has been suggested that users may be developing Intranets sooner than they would have had Y2K not been an issue, in an attempt to beat the critical deadline. The principle behind this suggestion is that by building Intranets now, users avoid the double spending on major IT upgrades of Y2K in the short term and Intranets in the medium term.

INPUT's findings suggest this is not happening. Exhibits IV-12, IV-13 and IV-14 show the influence that Y2K is having on users' development or consideration of Intranets. The response is overwhelmingly negative: overall, Y2K appears to be a negligible factor in driving Intranet development and cannot therefore be recommended as a strategic element in IT vendors' Intranet services marketing.

Exhibit IV-12

Influence of Year 2000 on Intranet Development (Intranet Owners)



Average: 1.8

Sample: 27 *Source: INPUT*

Exhibit IV-13

Influence of Year 2000 on Intranet Development (Intranet Builders)

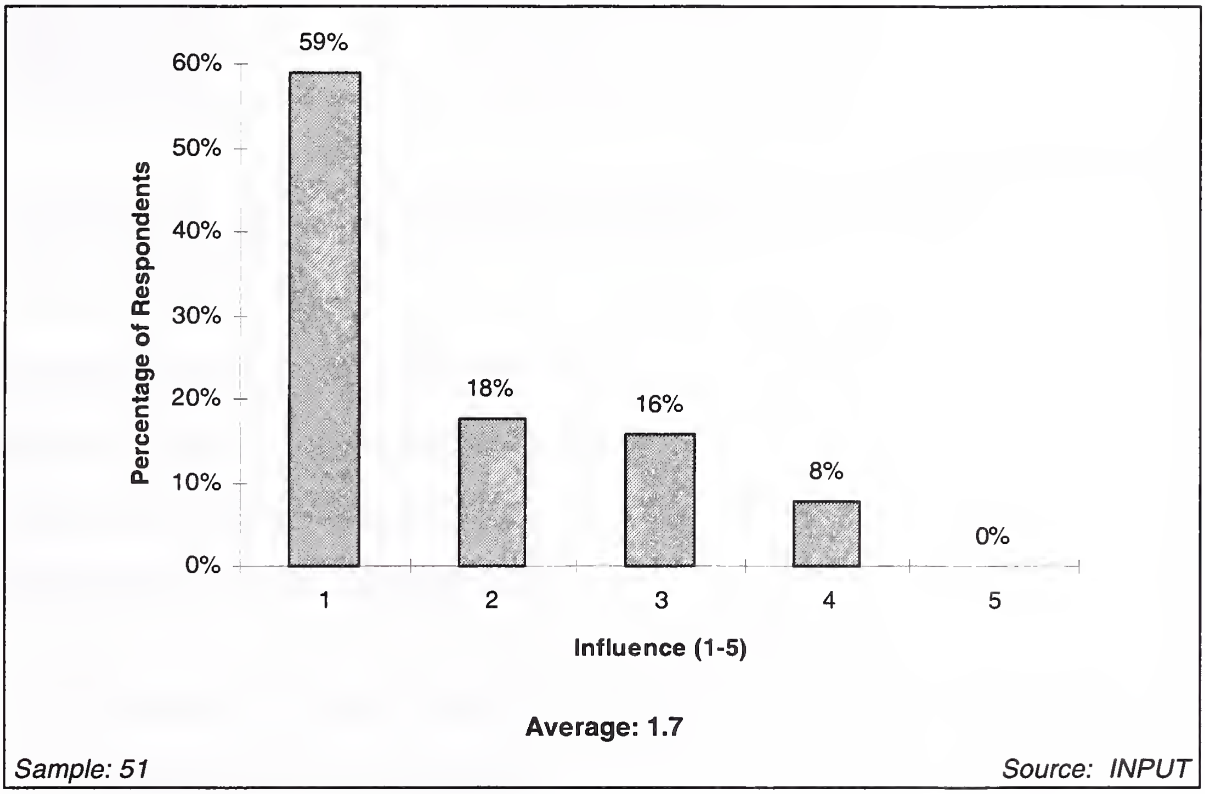
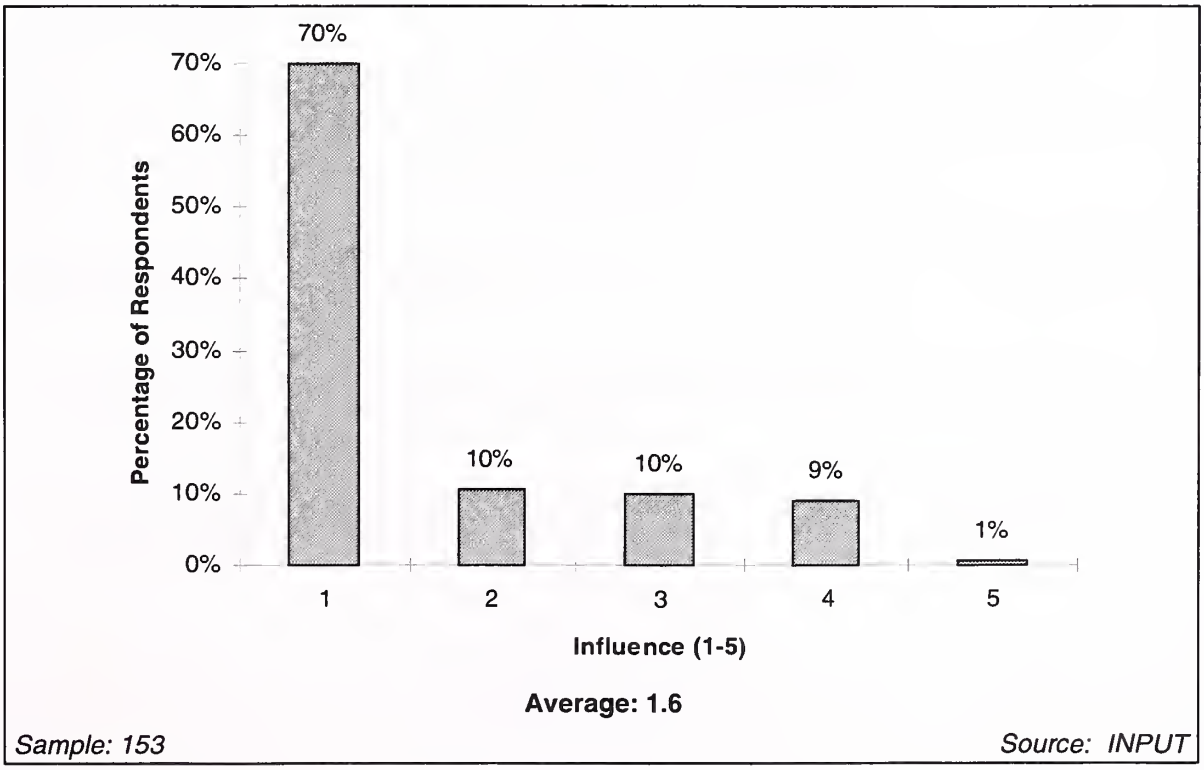


Exhibit IV-14

Influence of Year 2000 on Intranet Development (Intranet Evaluators)

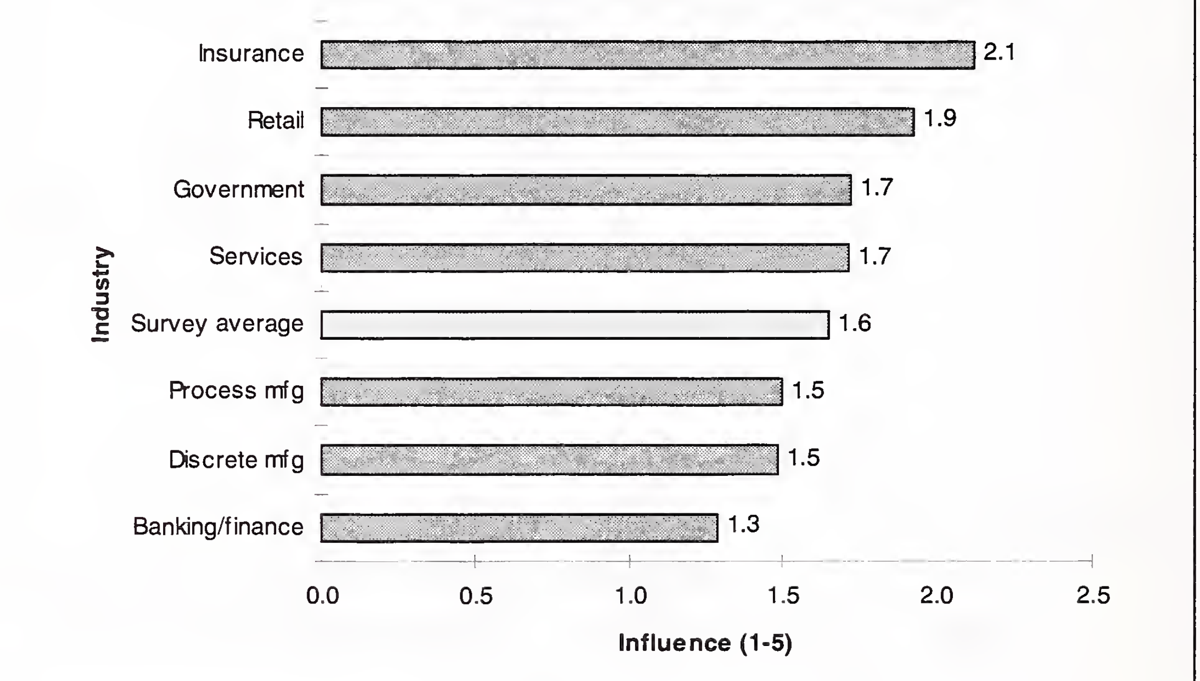


2. By Industry

Exhibit IV-15 shows the influence that Y2K is having Intranet activities by industry sector. The insurance industry is most influenced by Y2K, rating the influence at 2.1 compared with the average (for Owners, Builders and Evaluators) of 1.6. The other industry sectors are equally distributed around the average, with banking and finance being least influenced by the issue.

Exhibit IV-15

Influence of Year 2000 on Intranet Development (by Industry)



Sample: 186 *Source: INPUT*

V

Effect of Intranet on Existing Systems

A

Priority of Intranet Relative to Existing IT

Exhibits V-1 and V-2 show the priority that Intranet Owners and Builders respectively are giving to their Intranets compared with other areas of IT investment in three areas:

1. Implementation
2. Application development
3. On-going support

Each phase of operation follows on from the previous phase—an Intranet is built, then enhanced, then supported—so we regard implementation as the earliest phase and support as the latest phase.

In general, the earlier the phase of operation, the higher the priority given to it. For both Owners and Builders:

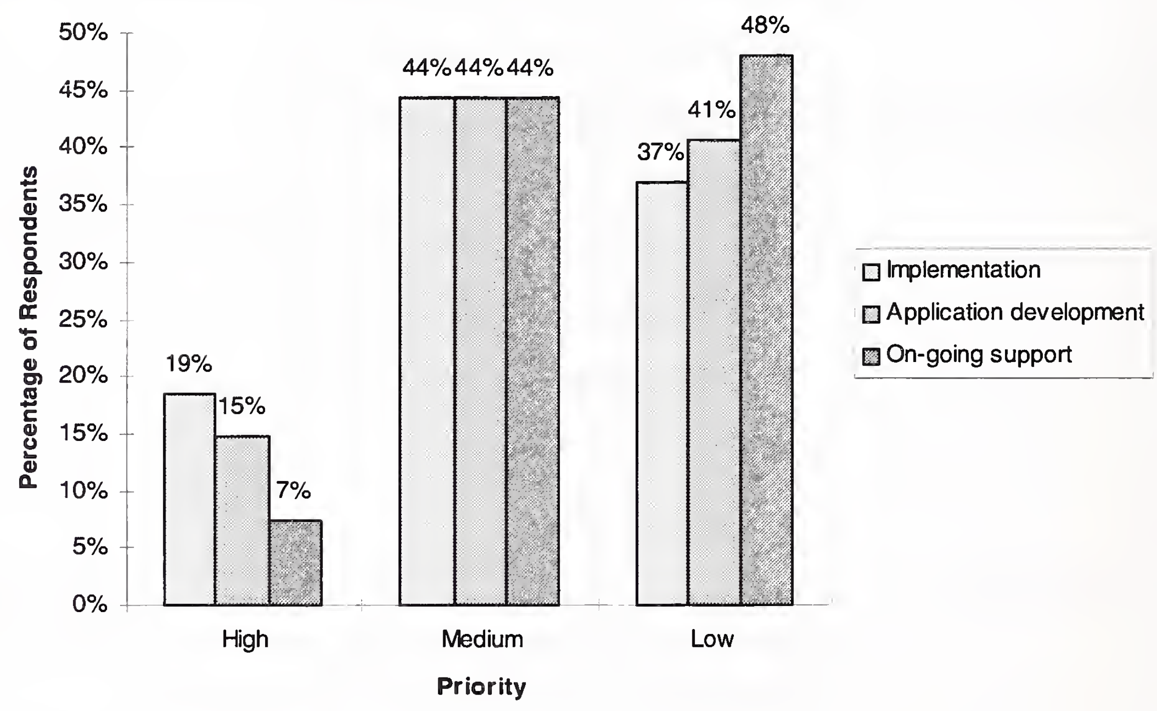
- Implementation (earliest phase) is the category most often given high priority and least often given low priority
- On-going support (latest phase) is the category least often given high priority and most often given low priority

This pattern indicates that the Intranet market is still immature—the focus is on development, not on support—and that service offerings related to initial Intranet development should be most in demand.

This result would be expected of organisations currently building Intranets, given their stage in the development cycle. However, organisations who have already built their Intranet and are now supporting it report a similar priority pattern, showing that where Intranets already exist, they are given only low-to-medium, priority compared with existing systems.

Exhibit V-1

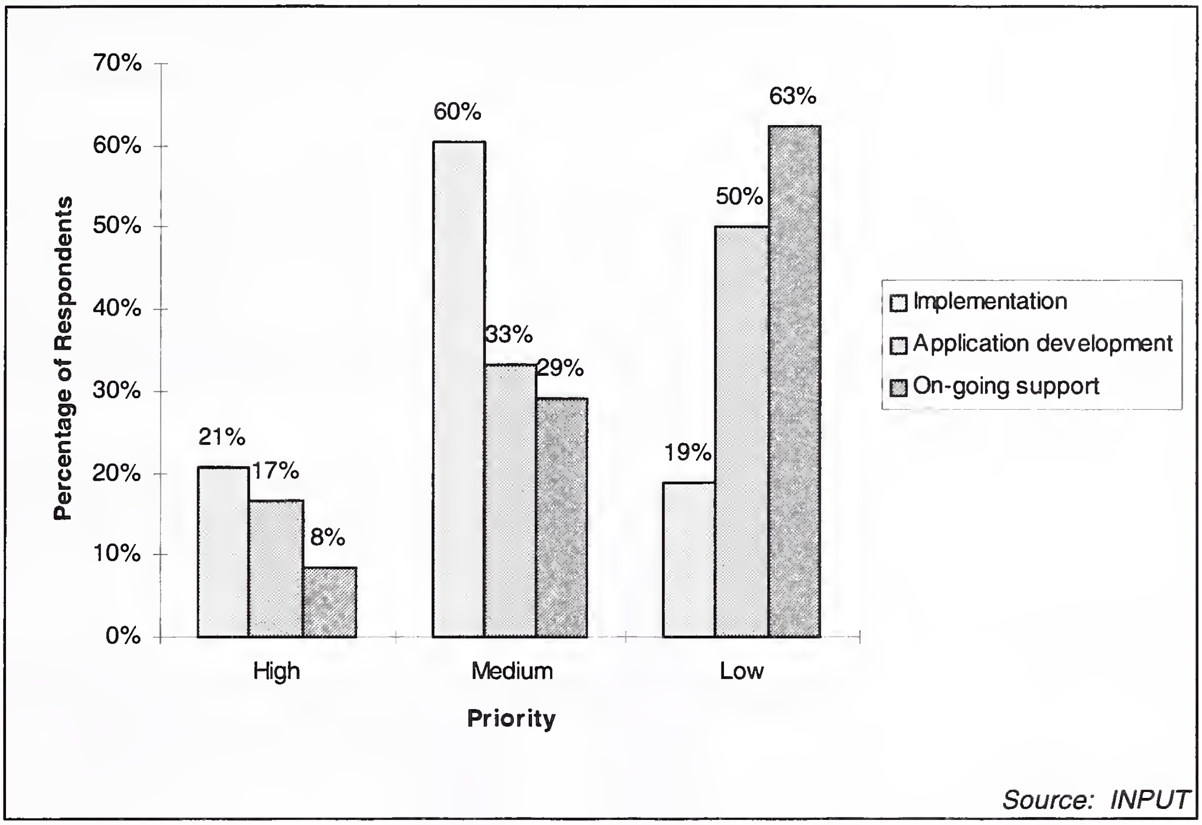
Priority of Intranet Relative to Existing IT (Intranet Owners)



Source: INPUT

Exhibit V-2

Priority of Intranet Relative to Existing IT (Intranet Builders)



Source: *INPUT*

B

Effect of Intranet on Existing Systems By 1999

1. By Current Intranet Status

The views of respondents on how their Intranet will affect their existing IT systems between 1997 and 1999 are shown in Exhibits V-3, V-4 and V-5 (Intranet Owners, Builders and Evaluators respectively).

Possible scenarios were:

- Intranet will quickly displace existing systems
- Intranet will gradually displace existing systems
- Intranet will integrate with existing systems
- Intranet will have little or no effect on existing systems

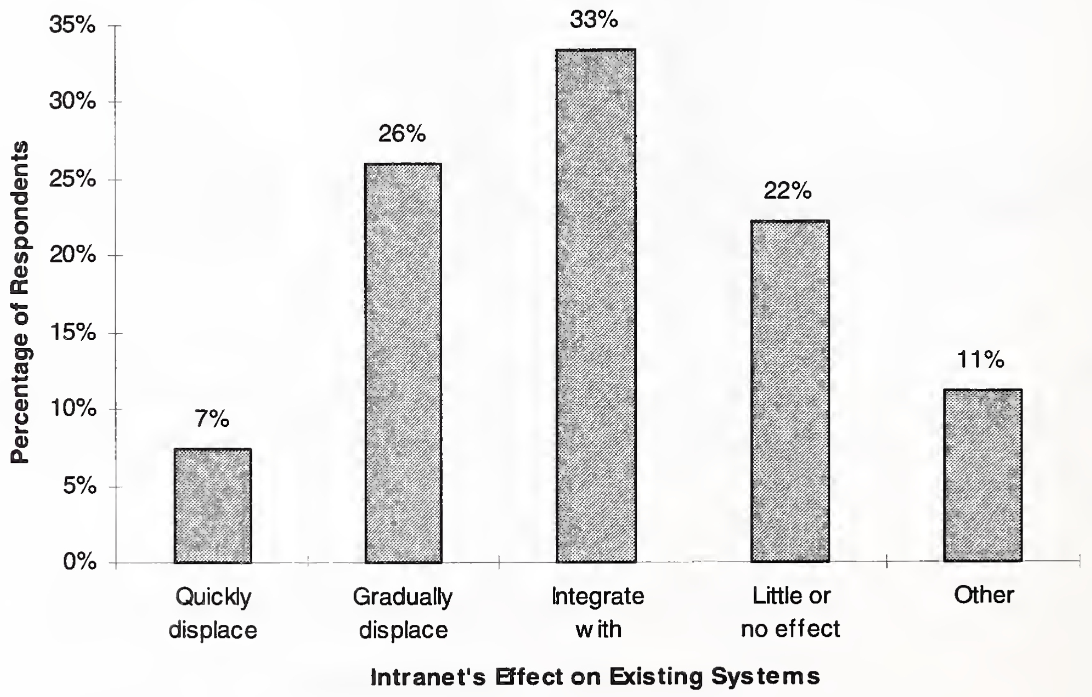
The pattern is the same for Owners and Builders. Very few organisations anticipate a 'big bang' effect whereby their Intranet rapidly supplants existing systems. The most common anticipated effects are longer-term displacement of existing systems by an Intranet and a merging of Intranet with existing systems. Owners were slightly more likely than Builders to believe that their Intranet would have little or no effect on their current systems.

Evaluators were less convinced that an Intranet would have much effect on existing systems. Unlike Owners and Builders, the most frequent response from Evaluators was that an Intranet would have little or no effect on existing IT. This suggests that the excitement surrounding Intranets may be beginning to calm as case studies of established Intranets become more common.

For all categories of user, it is evident that promotion of Intranets as a quick replacement for current systems is unlikely to receive an empathetic response.

Exhibit V-3

Expected Effect of Intranet on Existing Systems, 1997-1999 (Intranet Owners)



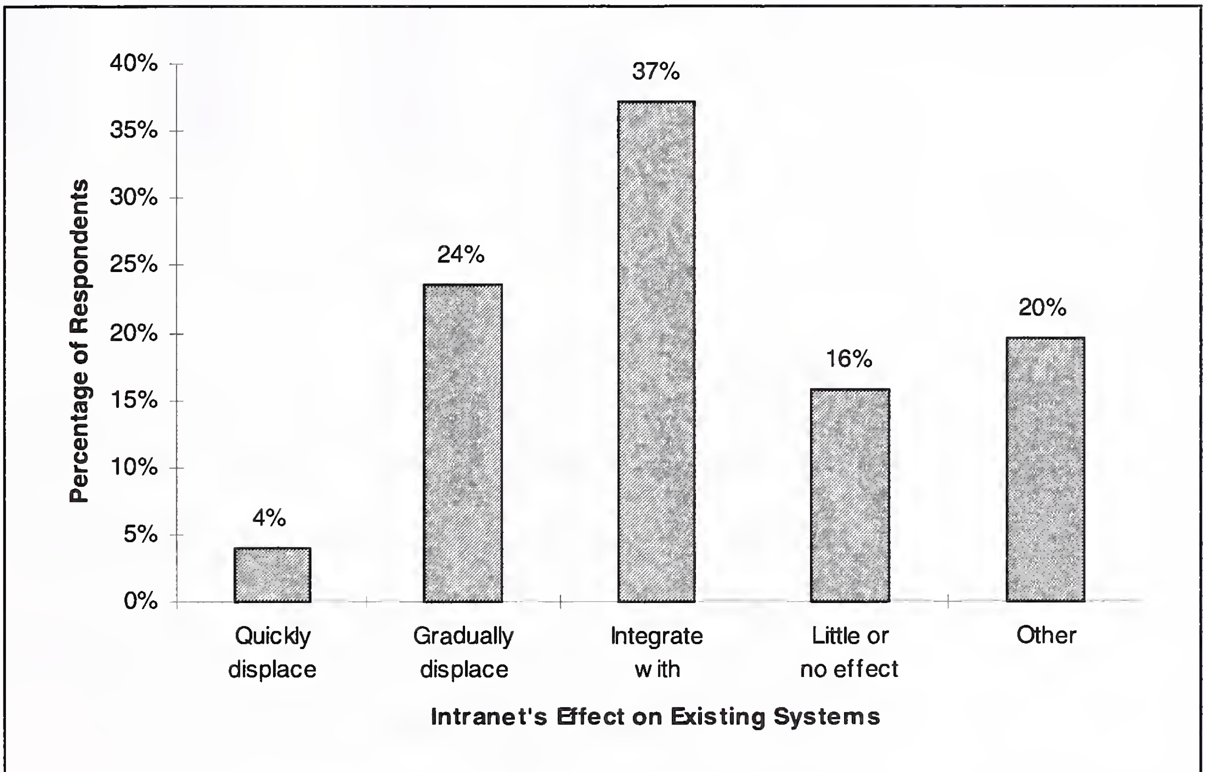
Sample: 27 *Source: INPUT*

Comments made by Owners for "Other" effects included:

- "Short term gradual effect but it could be some years before it displaces major existing systems"
- "Extension to existing systems"
- "Front-end to existing systems"

Exhibit V-4

Expected Effect of Intranet on Existing Systems, 1997-1999 (Intranet Builders)



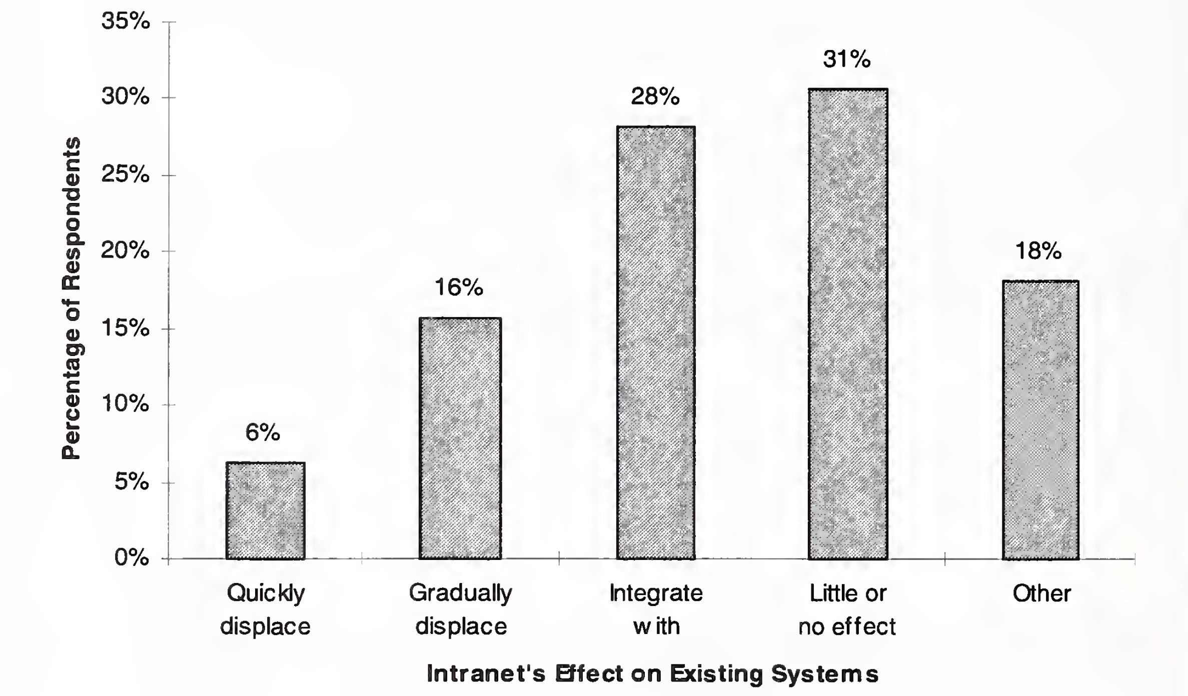
Sample: 51 *Source: INPUT*

Comments made by Builders for "Other" effects included:

- "Intranet is an alternative way for us to go where we would have got to anyway by other means"
- "Partial integration and some replacement of existing systems"
- "It will be seen as an extension"
- "To act as a subsystem to existing systems"

Exhibit V-5

Expected Effect of Intranet on Existing Systems, 1997-1999 (Intranet Evaluators)



Sample: 160 *Source: INPUT*

Comments made by Evaluators for "Other" effects included:

- Enhanced communication between existing systems
- Intranet would act as a front end to existing databases
- Intranet would replace paper-based systems first

1. By Industry

Exhibit V-6 shows the views of respondents within specific industry sectors on how their current or future Intranets would affect their existing IT. The major findings from this industry breakdown are as follows:

- The retail industry is most confident that Intranets will quickly replace existing systems, followed by process manufacturing and insurance.
- The insurance industry is most confident that Intranets will gradually replace existing systems, followed by process manufacturing and services.

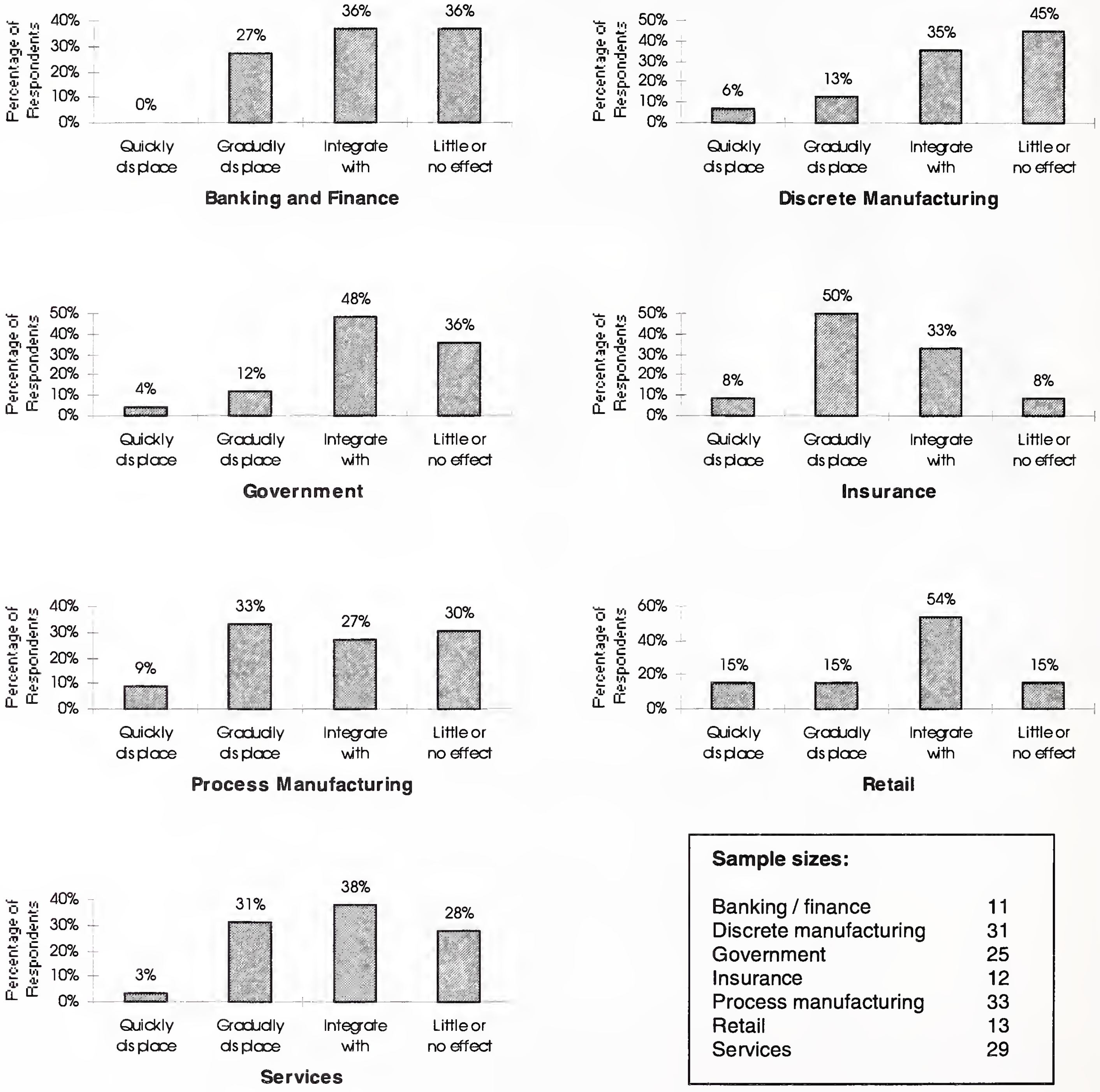
- The retail industry is most confident that Intranets will integrate with existing systems, followed by government and services.

- The discrete manufacturing industry is most confident that Intranets will have little or no effect on existing systems, followed by banking / finance and government.

- The insurance and retail industries are most confident that Intranets will have at least some effect on existing systems; only eight and 15% of respondents respectively believe an Intranet would have little or no effect on existing IT.

Exhibit V-6

Expected Effect of Intranet on Existing Systems, 1997-1999 (by Industry)



Sample sizes:

Banking / finance	11
Discrete manufacturing	31
Government	25
Insurance	12
Process manufacturing	33
Retail	13
Services	29

Source: INPUT

C

Integration of Intranet With Existing Systems By 1999

Exhibits V-7 and V-8 show how tightly integrated Owners' and Builders' Intranets are with existing systems now and what level of integration they expect to achieve by 1999. Exhibit V-9 shows the level of integration Evaluators would expect to achieve on implementation of an Intranet.

Intranets are currently not integrated at all tightly into existing environments by Owners, nor are they expected to be by Builders on initial implementation. Most respondents in both cases rated the level of integration as only one or two out of five.

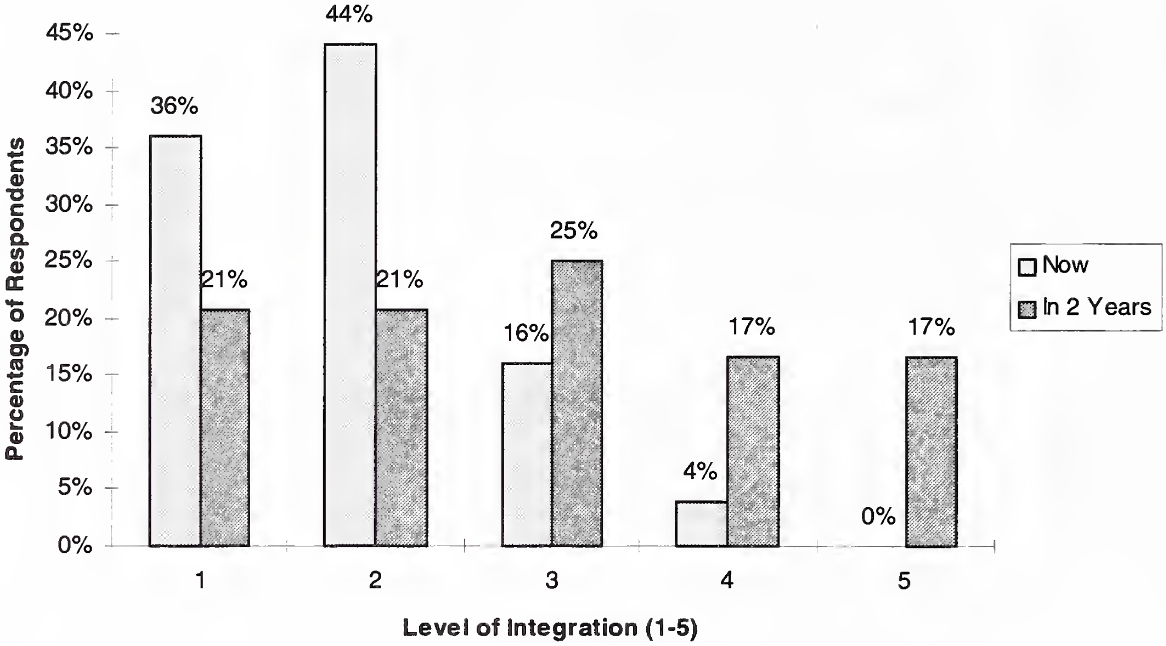
In time, however, Intranets are expected to be brought increasingly into the mainstream IT environment. Owners expect a medium level of integration, but Builders (many of whom may not yet have faced integration problems) are more optimistic, and expect a significantly higher level.

Intranet Evaluators, who have not embarked on any significant development, are more confident overall of attaining a higher level of integration on initial implementation than other users. The profile of Evaluators' responses, though, shows that while many believe they will achieve above-average results, the most common expectation is that of little or no integration.

There is a clear opportunity for system and network integration vendors to bridge the gap between the low integration of today to the medium-to-high integration users expect to achieve by 1999.

Exhibit V-7

Levels of Integration Between Intranet and Existing Systems, 1997 and 1999 (Intranet Owners)



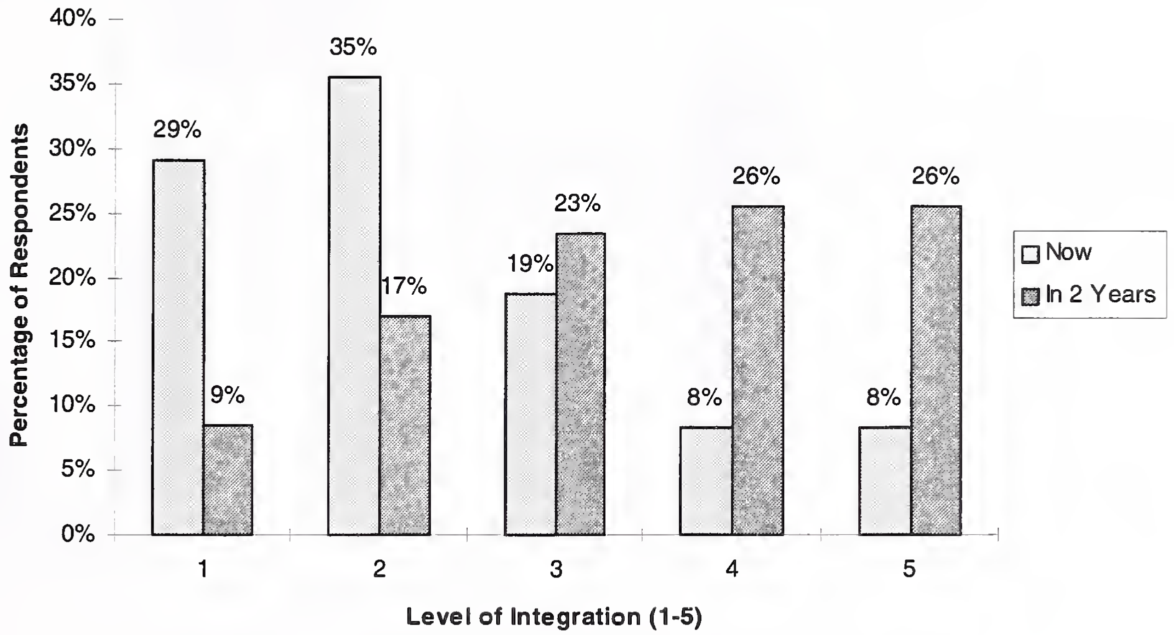
Average 1997: 1.9
Average by 1999: 2.9

Sample: 25

Source: INPUT

Exhibit V-8

Levels of Integration Between Intranet and Existing Systems, 1997 and 1999 (Intranet Builders)



Average 1997: 2.3

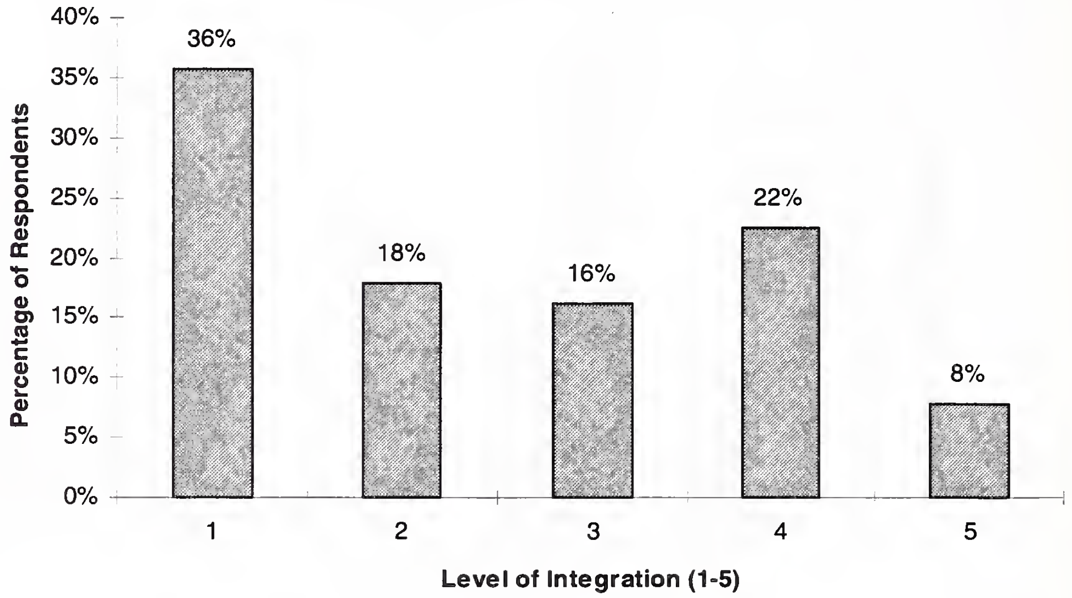
Average by 1999: 3.4

Sample: 48

Source: INPUT

Exhibit V-9

Expected Level of Integration Between Intranet and Existing Systems (Intranet Evaluators)



Average: 2.5

Sample: 129

Source: INPUT

VI

Use of Intranet for Critical Data and Applications

A

Data Sensitivity

1. Company-Sensitive Data

Exhibit VI-2 shows the level of sensitivity of the most sensitive data that Intranet Owners are currently passing over their Intranet. Exhibit VI-3 shows the level of sensitivity of the most sensitive data that Intranet Builders expect to pass over their Intranet.

The ratings are tidemarks: a respondent would score a rating of “high” if any data, regardless of volume, passing over the Intranet was of “high” sensitivity. Examples of different levels of data sensitivity are given in Exhibit VI-1.

Exhibit VI-1

Examples of Data Sensitivity

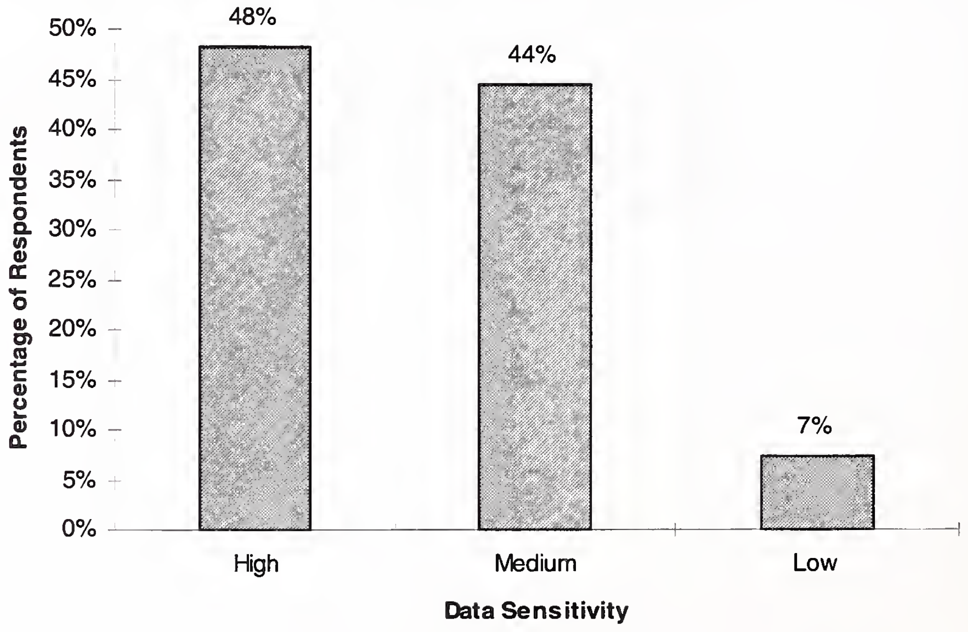
Data Sensitivity	Business Activity
High	Financial planning data Product development plans Employee records
Medium	Routine memoranda Company policy manuals
Low	Marketing literature Staff directories

Source: INPUT

Only a very small number of Owners restrict the data they pass over it to "low" sensitivity. A considerably higher proportion of Builders expect to restrict the data passed over their Intranets to that of "low" sensitivity, although they are still the smallest group, forming a quarter of respondents.

Exhibit VI-2

Maximum Sensitivity of Data on Intranet (Intranet Owners)

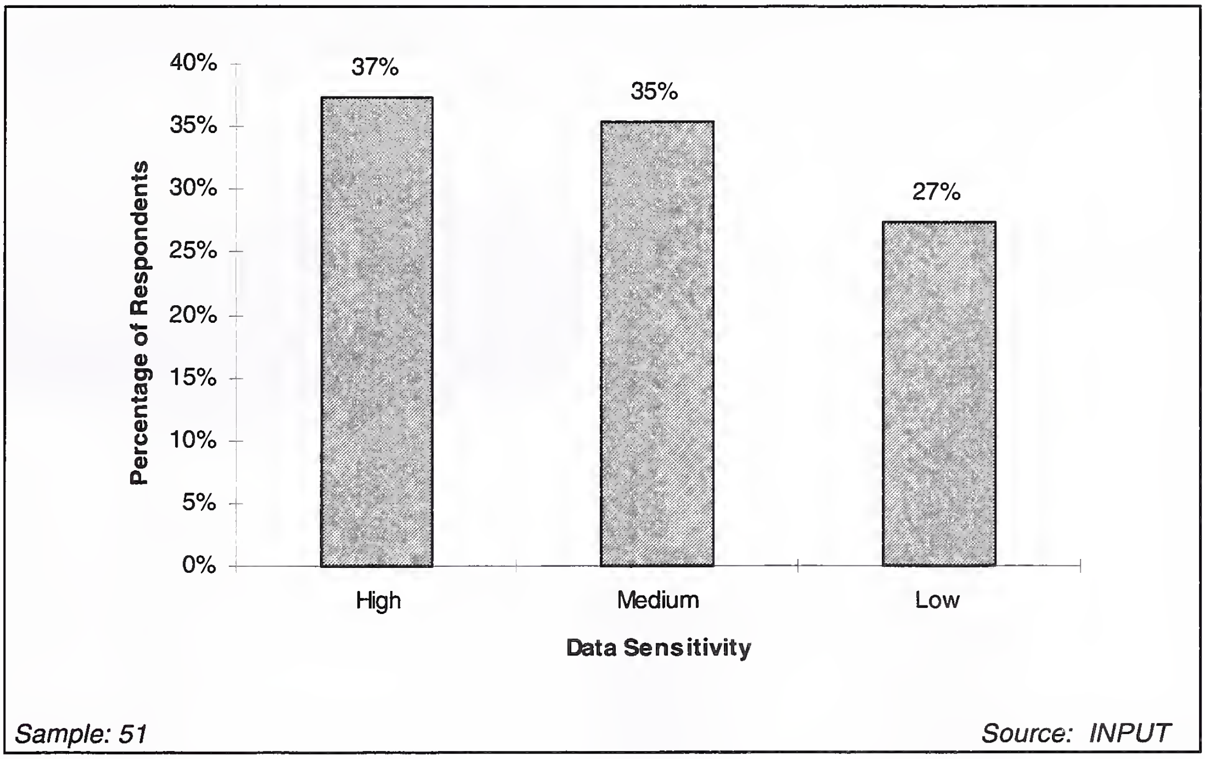


Sample: 27

Source: INPUT

Exhibit VI-3

Maximum Sensitivity of Data on Intranet (Intranet Builders)



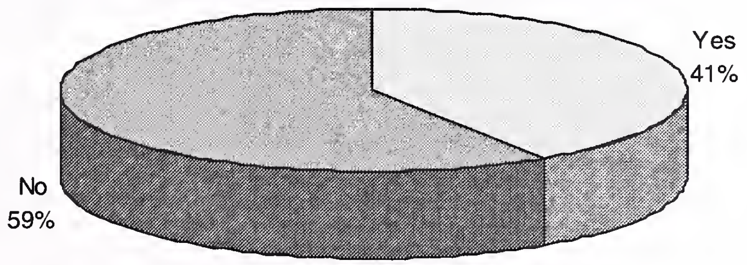
Sample: 51 *Source: INPUT*

2. Financial Transactions

Exhibits VI-4 and VI-5 show the proportion of respondents that currently route (Owners) or expect to route (Builders) financial transactions (for example: transactions containing a credit card number or purchase orders) over their Intranet. The results are the same in both cases: 41% currently, or expect to pass financial transactions over their Intranet.

Exhibit VI-4

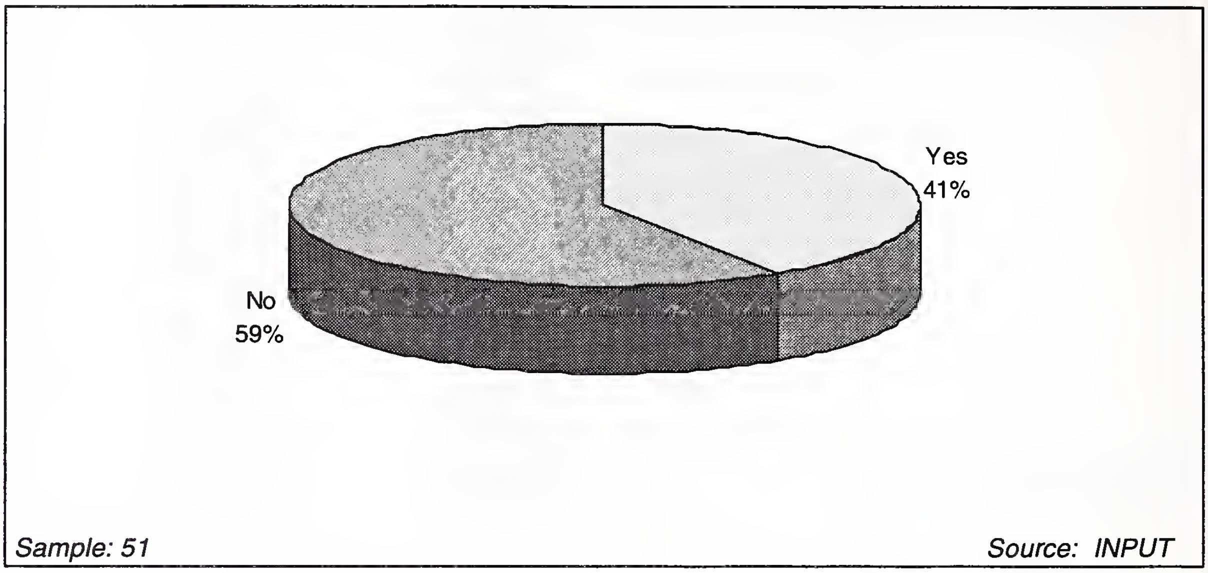
Routing Financial Transactions Over Intranet (Intranet Owners)



Sample: 27 *Source: INPUT*

Exhibit VI-5

Routing Financial Transactions Over Intranet (Intranet Builders)



Sample: 51

Source: INPUT

B
Application Criticality

Exhibit VI-7 shows the criticality of the most critical application that Owners are currently running on their Intranet. Exhibit VI-8 shows the criticality of the most critical application that Builders expect to run on their Intranet.

The ratings are tidemarks: a respondent would score a rating of "high" if any application, regardless of volume, used over the Intranet was highly critical. Examples of different critical levels of application are given in Exhibit VI-6.

Exhibit VI-6

Example of Application Criticality

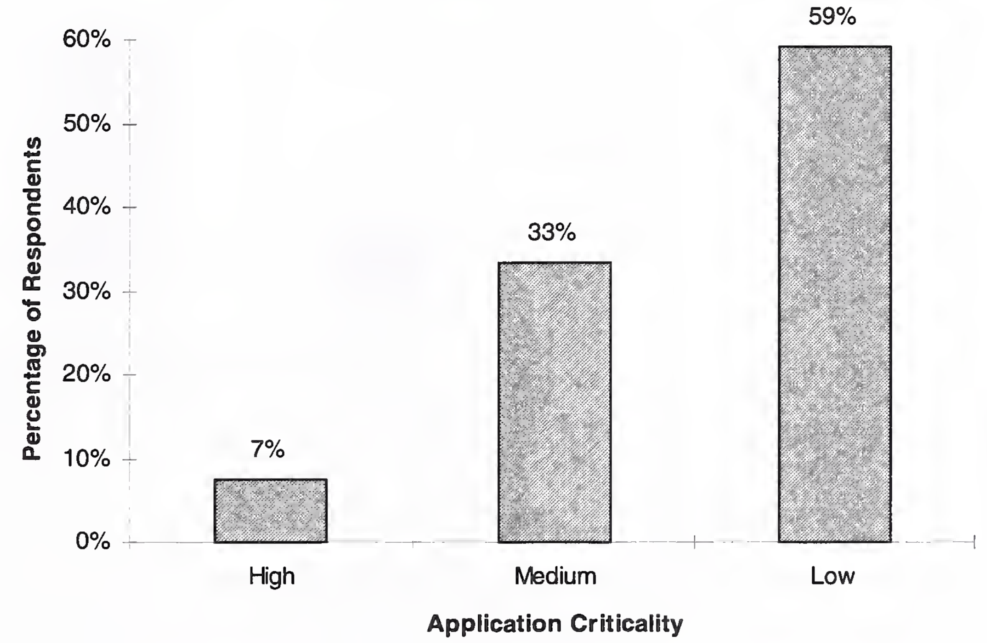
Application Criticality	Examples
High	OLTP ERP
Medium	Office automation Document management
Low	Company bulletin board

Source: INPUT

In both cases, the pattern is the same, and the opposite of the pattern evident for data sensitivity. Among both Owners and Builders, 59% currently, or expect to restrict Intranet use to non-critical applications only. Users and prospective users of Intranets appear to be highly cautious of trusting their mission- or business-critical applications to their Intranet, which underlines again the perception of Intranets as relatively unproven in the field.

Exhibit VI-7

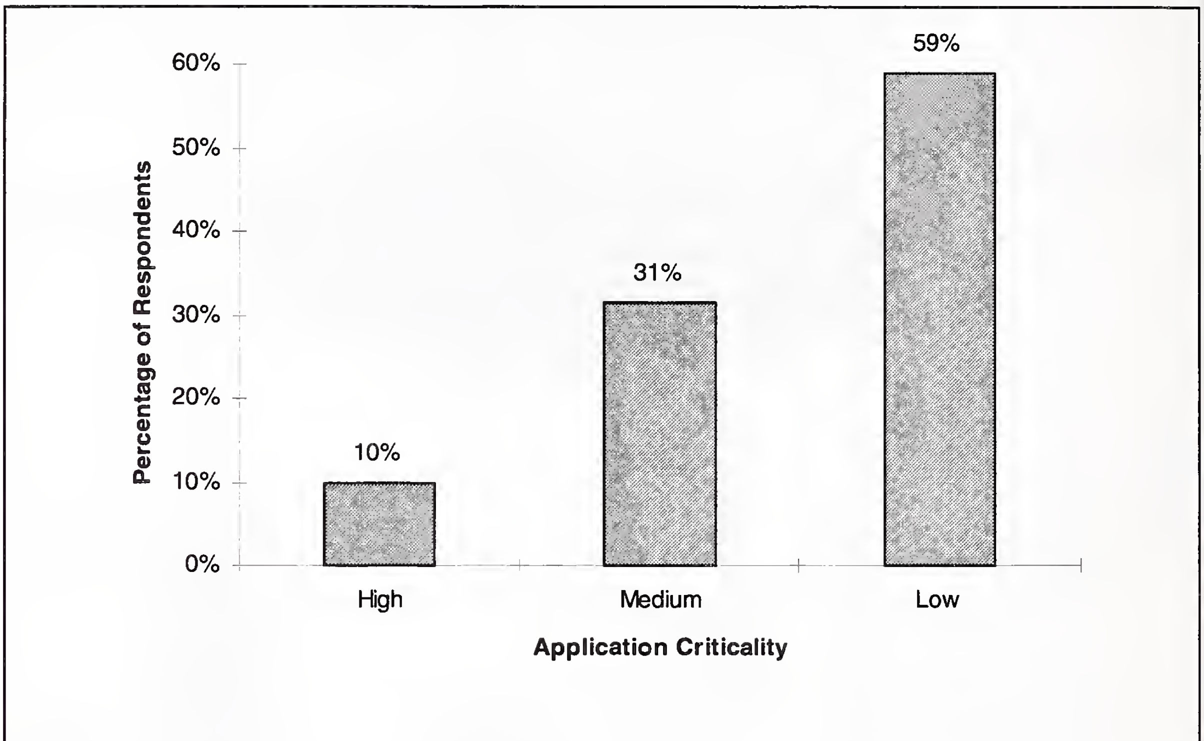
Most Critical Application Run on Intranet (Intranet Owners)



Sample: 27 *Source: INPUT*

Exhibit VI-8

Most Critical Application Run on Intranet (Intranet Builders)



Sample: 51 *Source: INPUT*

VII

External Intranet Services

A

External Intranet Services Used

1. By Current Intranet Status

Exhibits VII-1, VII-2 and VII-3 show the external services used by Intranet Owners and Builders, and those which are expected to be used by Intranet Evaluators.

There is no overwhelmingly popular service: no single service has been used or is expected to be used by more than around a quarter of respondents of any type. This finding provides further evidence that Intranets to date have been primarily self-developed efforts, but also that they appear to remain so in the near future: anticipated takeup of services by companies yet to make a decision on Intranet development is no greater than the measured takeup of services by companies further advanced in development.

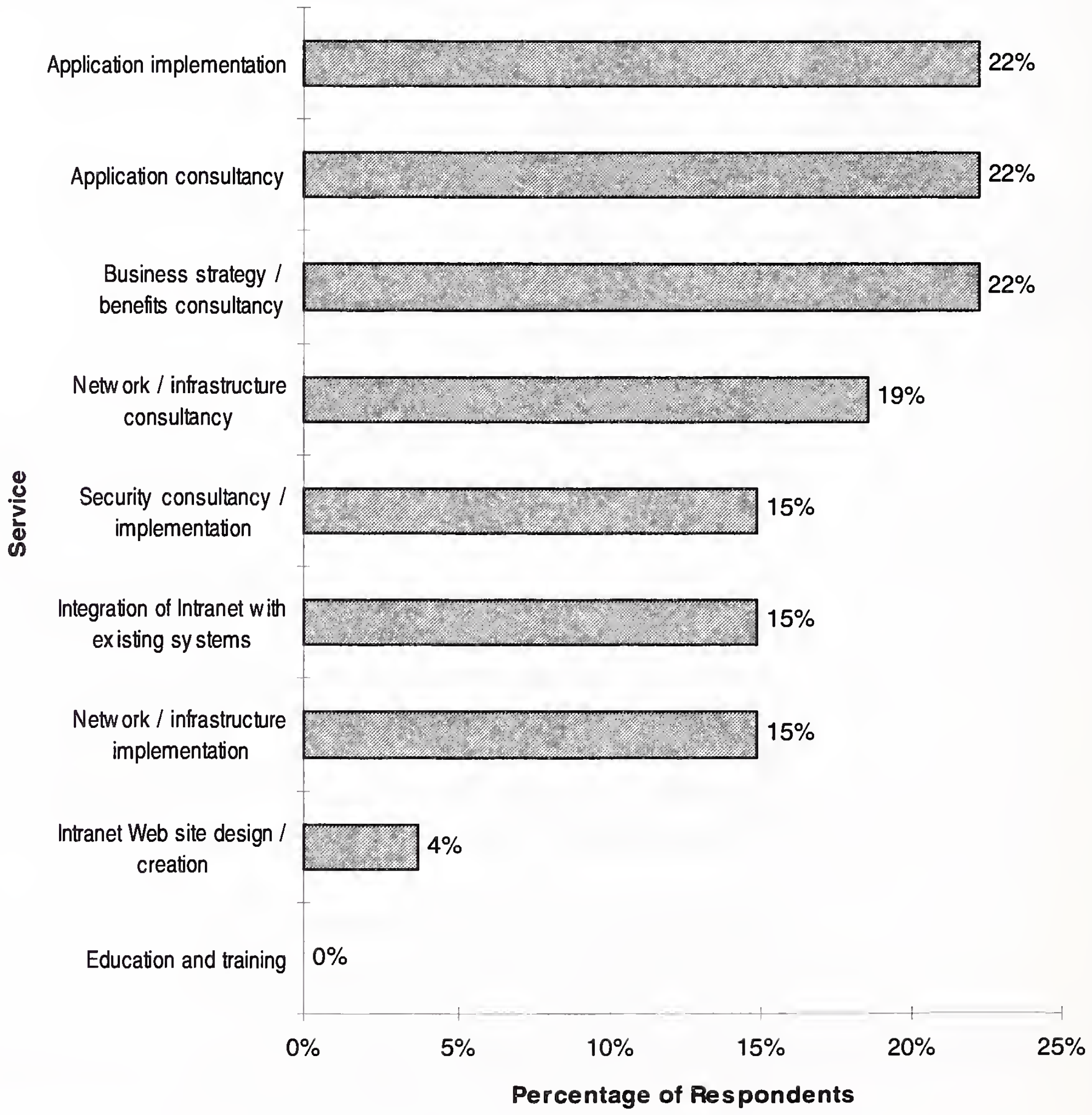
The usage of services reflects the stage at which the different respondents are in their Intranet development. Builders, who may be still in initial Intranet implementation, have not made as much use of application-related services as have Owners, who, having built their basic infrastructure, are currently populating it with applications—application consultancy and implementation services are most in demand among Owners.

Network infrastructure consultancy and implementation services are most in demand among Evaluators, as would be expected given the initial requirement of an Intranet of a network infrastructure.

In keeping with the in-house, bottom-up development of many existing Intranets, services which may have been considered non-essential—education and training, and Intranet Web site design and creation—have been used by almost no Intranet Owners. Those services are more in demand among organisations still in the development phase.

Exhibit VII-1

External Intranet Services Used (Intranet Owners)

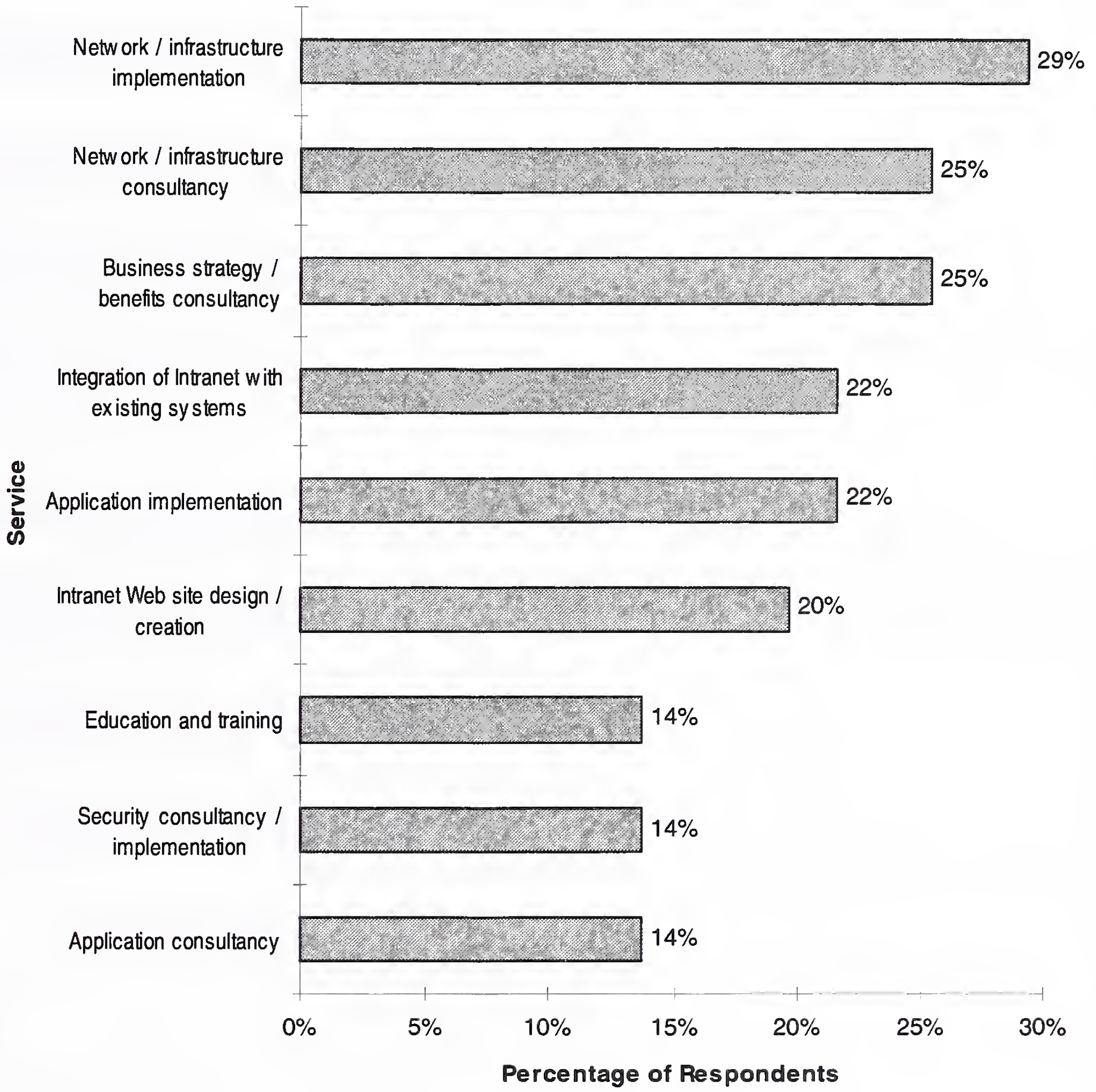


Sample: 27

Source: INPUT

Exhibit VII-2

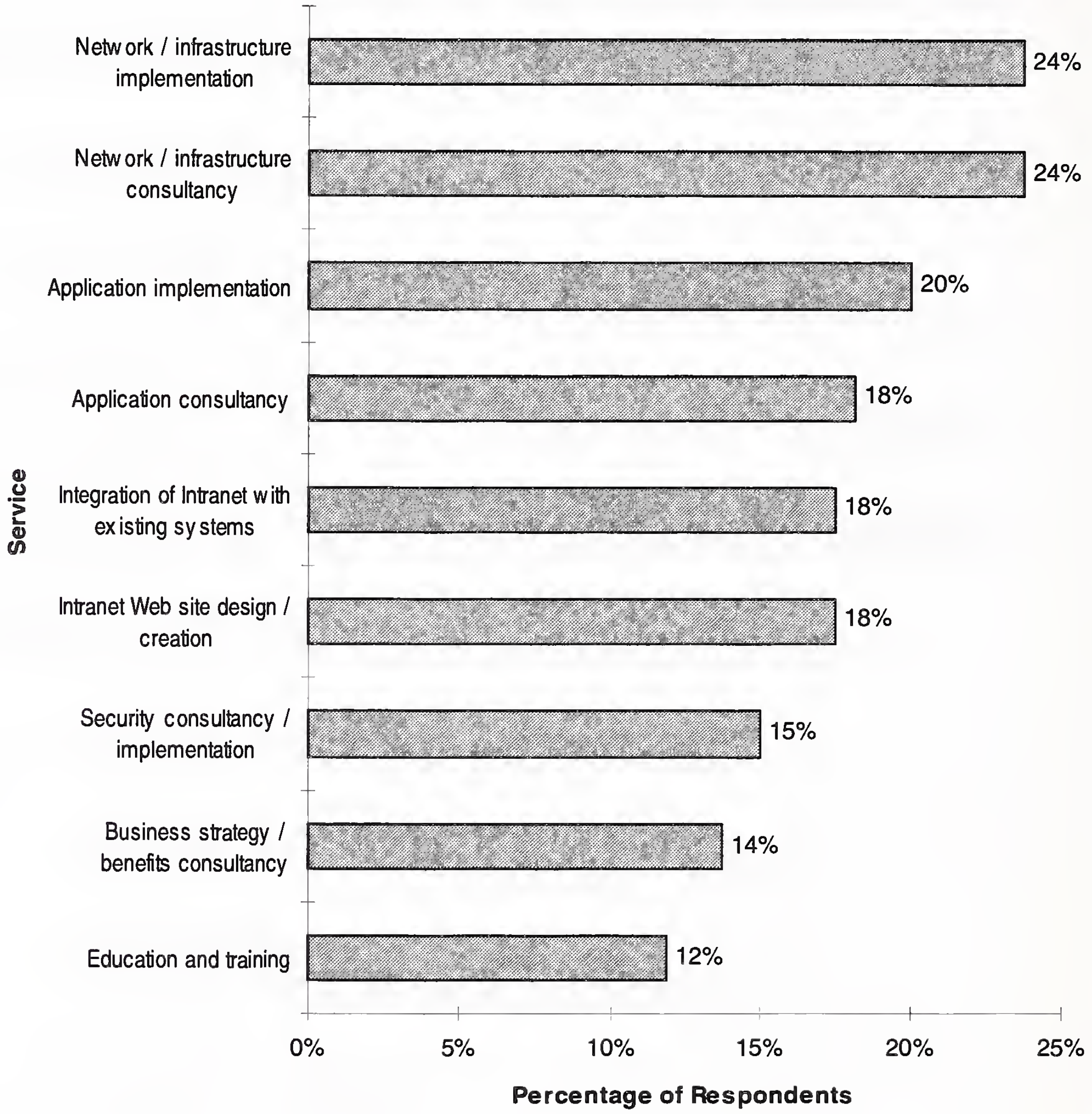
External Intranet Services Used (Intranet Builders)



Sample: 51 *Source: INPUT*

Exhibit VII-3

External Intranet Services to be Used (Intranet Evaluators)



Sample: 160 *Source: INPUT*

Owners and Builders were asked to specify services they have required but have not found on offer. Currently, most service needs are being met by vendors, as only a very few respondents stated they had not been able to find the services they required. Those services were:

- Legacy database integration (stated by three respondents)
- Assistance in selecting Intranet development tools (respondent commented: “difficult to establish requirements from vast range of tools on offer; guidance is needed here”)

- Risk-sharing element to Intranet agreements
- Education and consultancy services
- Obtaining Intranet and RPG skills from the same source

2. By Industry

Exhibits VII-5 to VII-11 show the current and expected use of external Intranet services by all types of user in specific industry sectors.

There is little variation between the industries in services used or services expected to be used. Deviations from the average are shown for each industry in Exhibit VII-4.

Exhibit VII-4

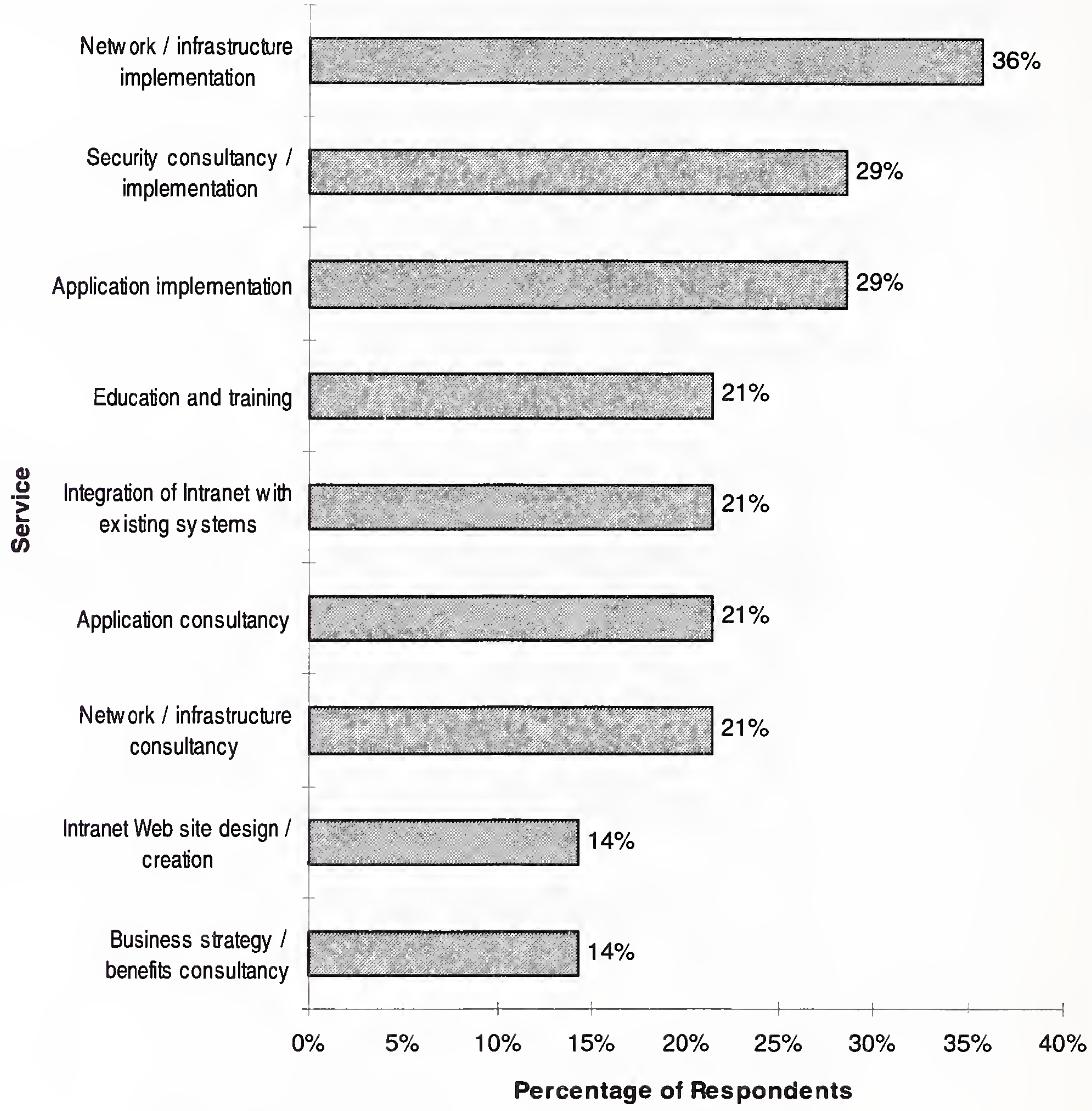
Use of External Intranet Services (by Industry)

Industry Sector	Services Used More	Services Used Less
Banking and finance	Security consultancy / implementation	—
Discrete manufacturing	Intranet Web site design / creation	—
Government	Business strategy / benefits consultancy	Integration of Intranet with existing systems
Insurance	Business strategy / benefits consultancy Network / infrastructure consultancy Intranet Web site design / creation	—
Process manufacturing	—	—
Retail	—	—
Services	—	—

Source: INPUT

Exhibit VII-5

Current and Expected Use of External Intranet Services (Banking and Finance)

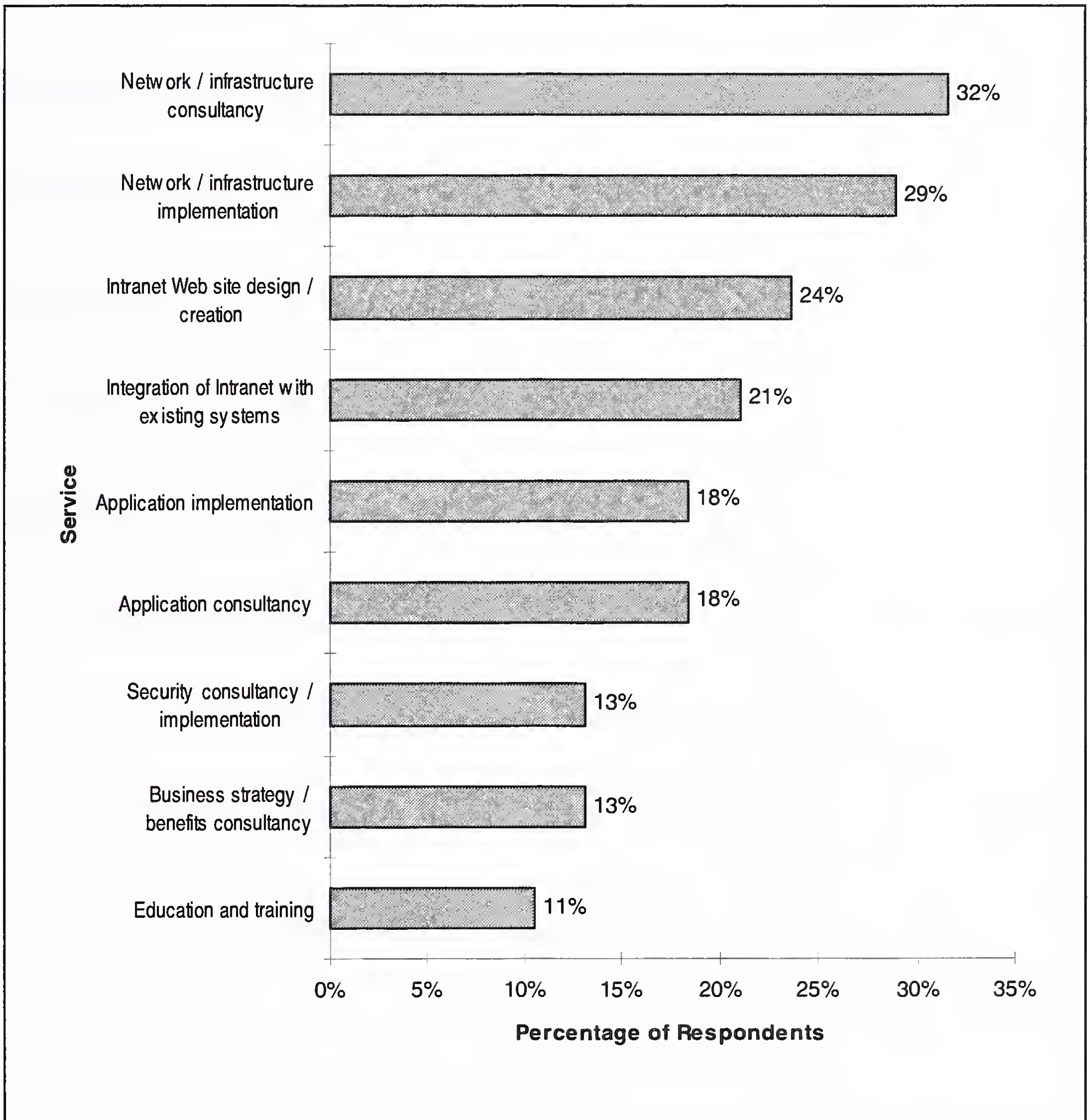


Sample: 14

Source: INPUT

Exhibit VII-6

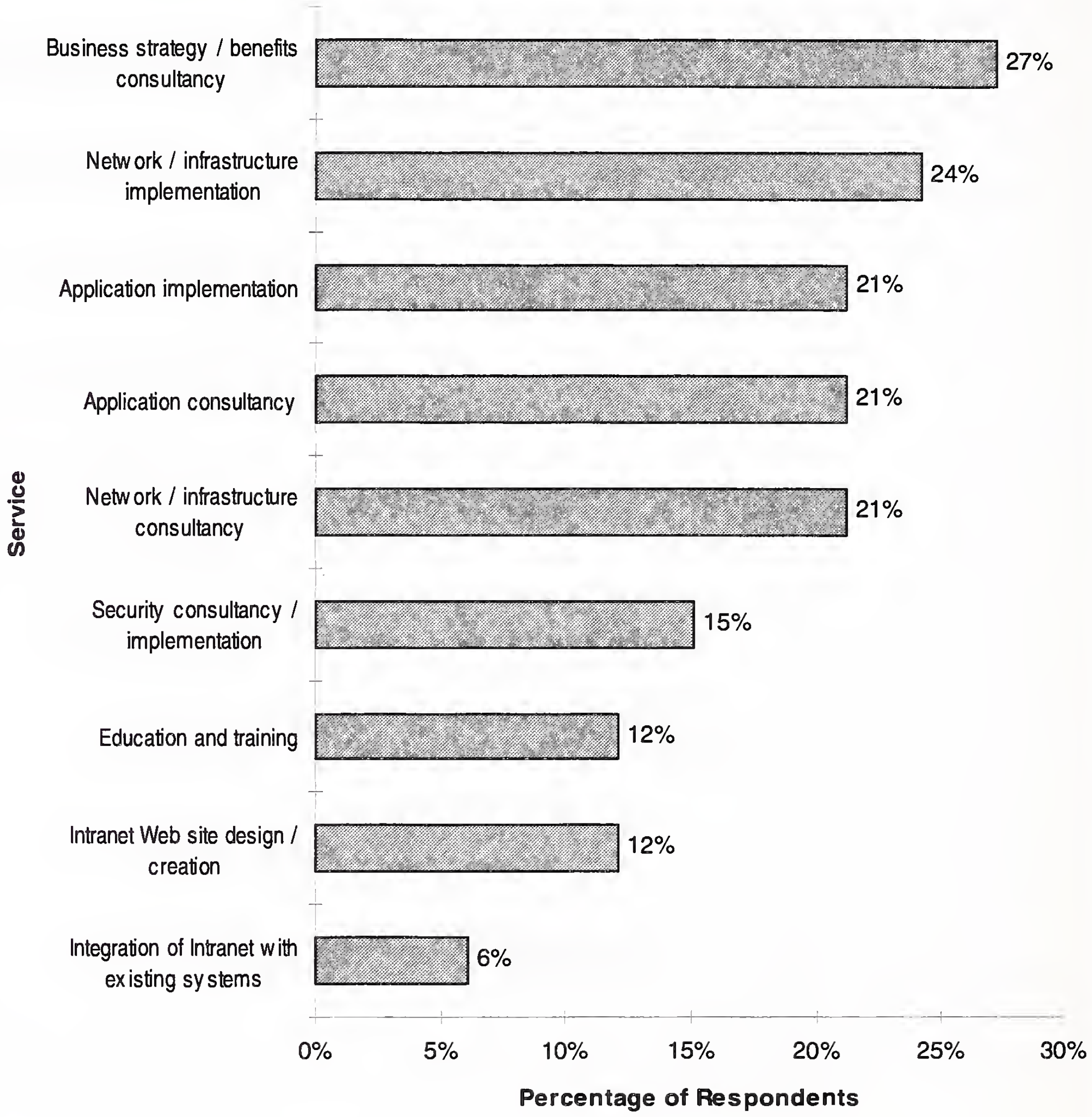
Current and Expected Use of External Intranet Services (Discrete Manufacturing)



Sample: 38 *Source: INPUT*

Exhibit VII-7

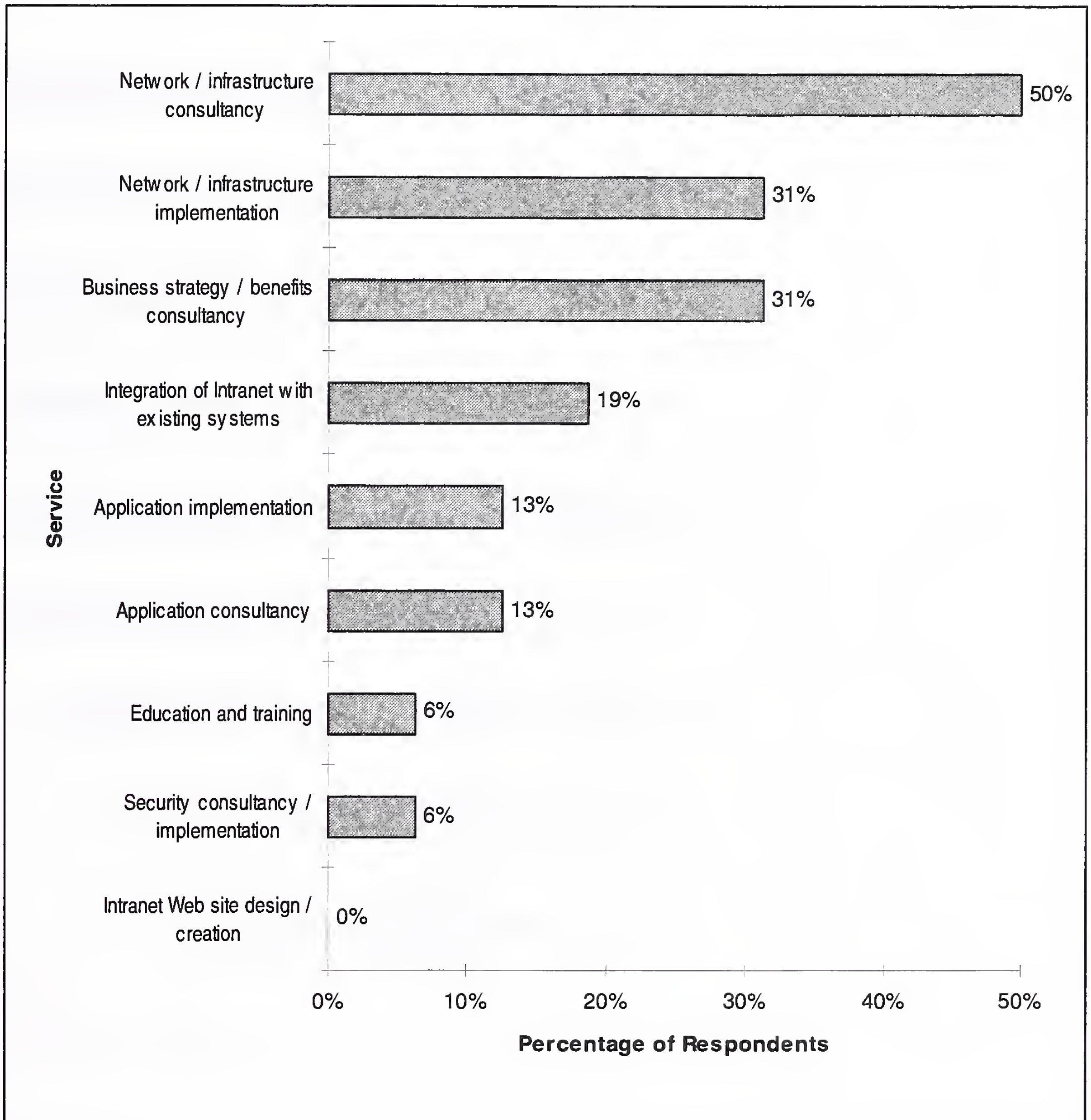
Current and Expected Use of External Intranet Services (Government)



Sample: 33 *Source: INPUT*

Exhibit VII-8

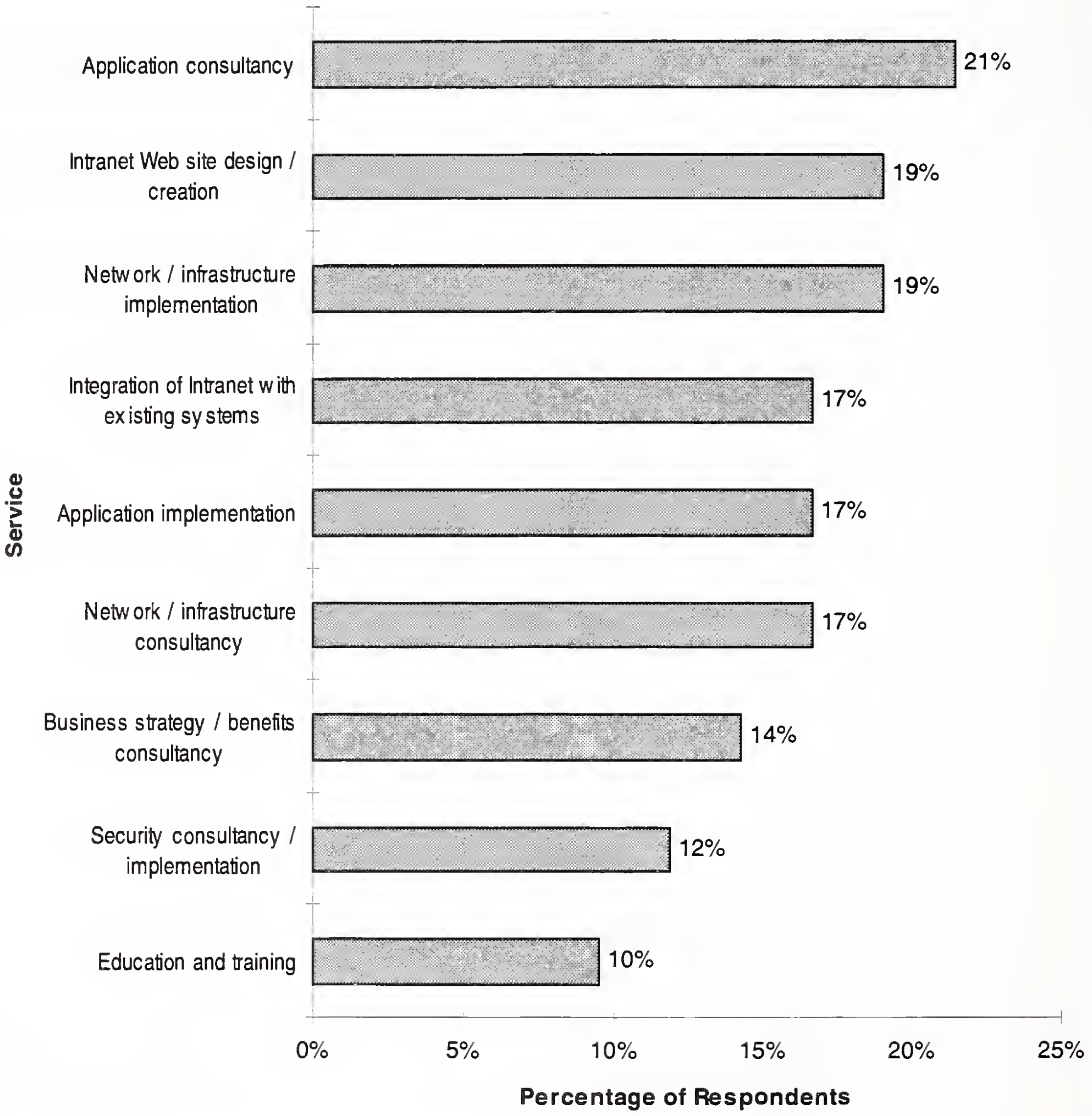
Current and Expected Use of External Intranet Services (Insurance)



Sample: 16 *Source: INPUT*

Exhibit VII-9

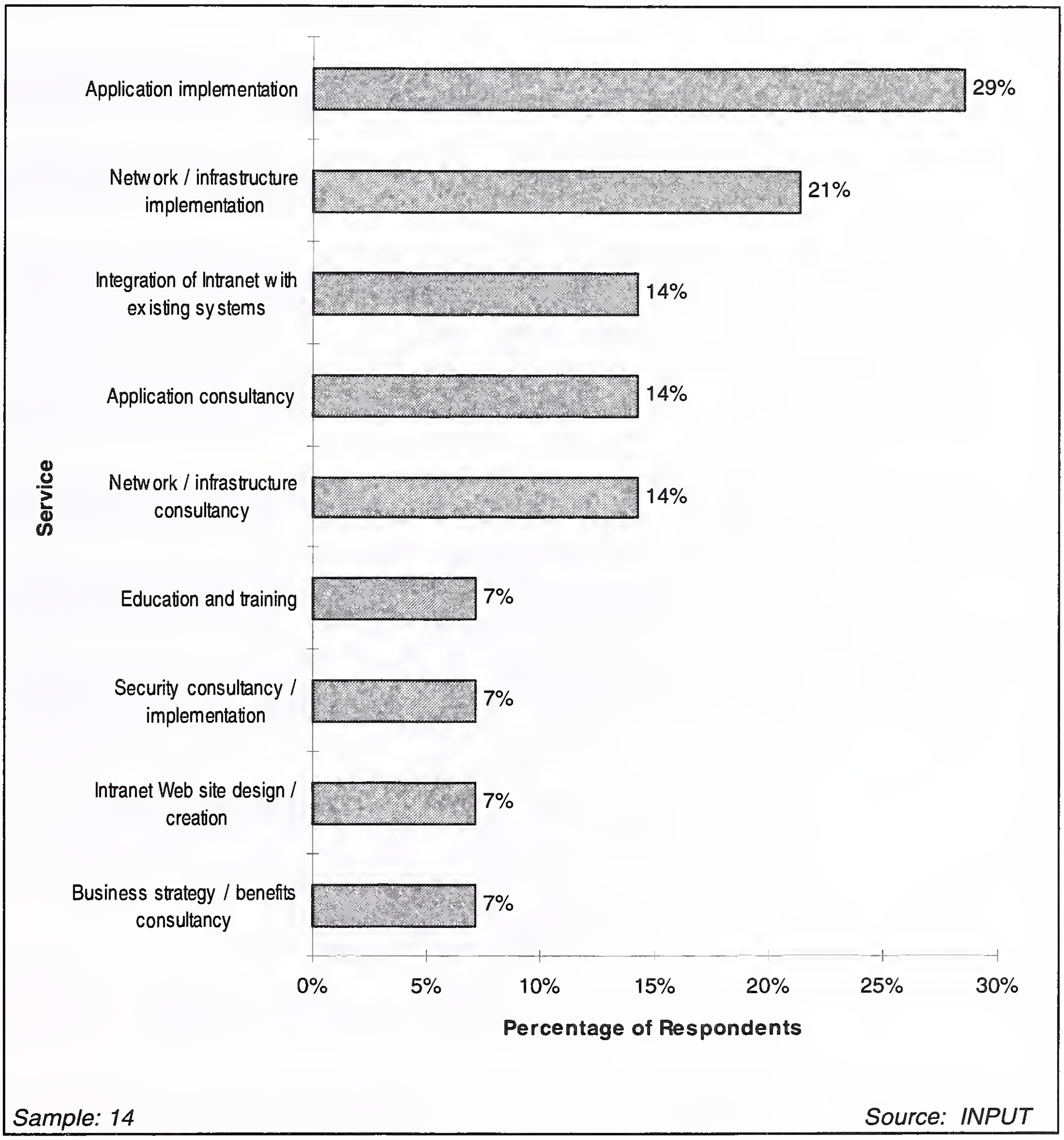
Current and Expected Use of External Intranet Services (Process Manufacturing)



Sample: 42 *Source: INPUT*

Exhibit VII-10

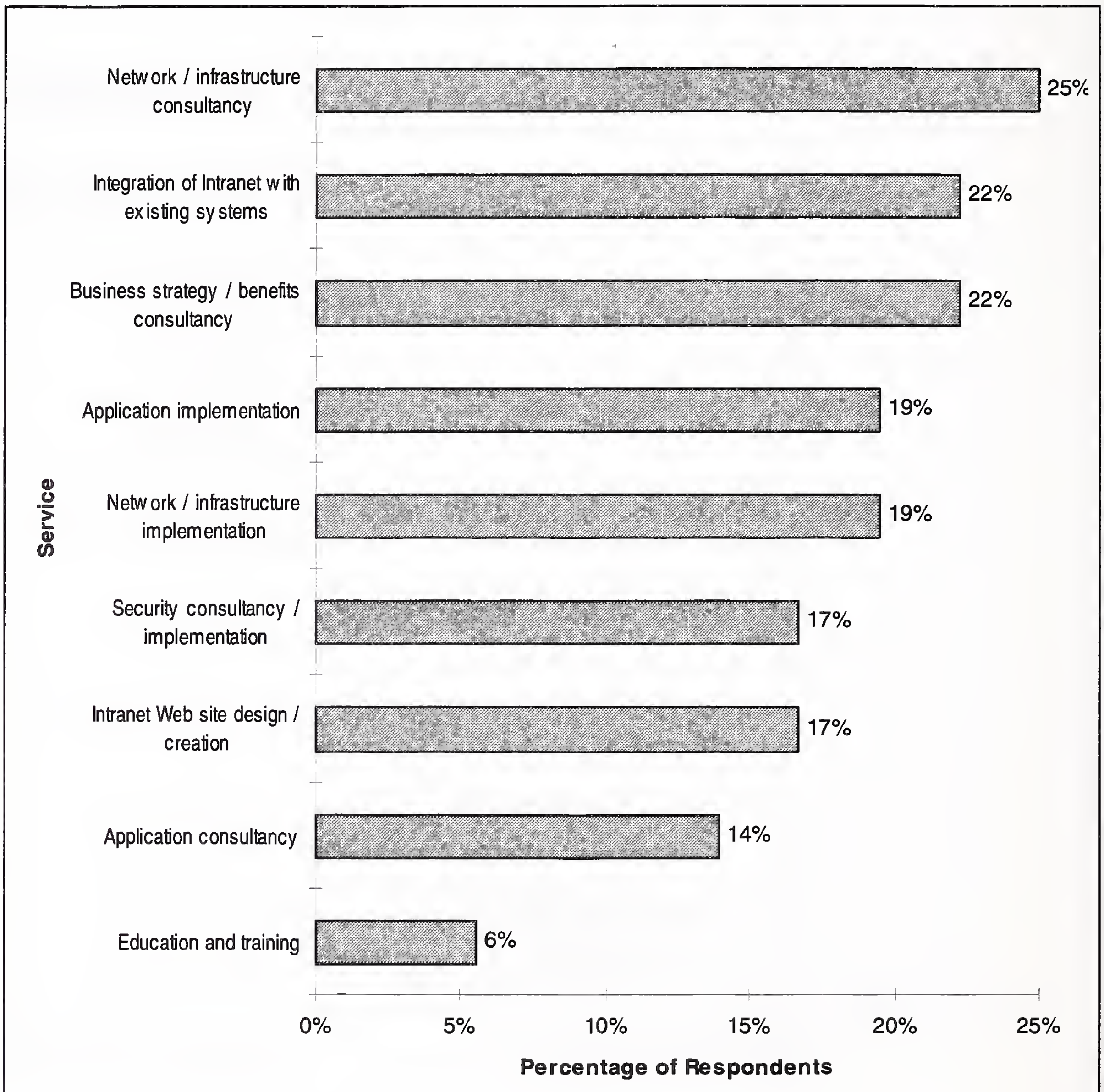
Current and Expected Use of External Intranet Services (Retail)



Sample: 14 *Source: INPUT*

Exhibit VII-11

Current and Expected Use of External Intranet Services (Services)



Sample: 36 *Source: INPUT*

B

Importance of External Intranet Services

1. By Current Intranet Status

Exhibits VII-12, VII-13 and VII-14 show the importance attached to each service offering by Owners, Builders and Evaluators respectively. The figures presented describe the importance of the service offering, not the importance of the underlying issue.

In all cases, security consultation and implementation is considered the most important service, by a significant margin. Security-related services have been used by only a relatively small proportion of companies who have used Intranet services to date, indicating either that users are not aware of available Intranet security services or that current offerings do not meet users' requirements.

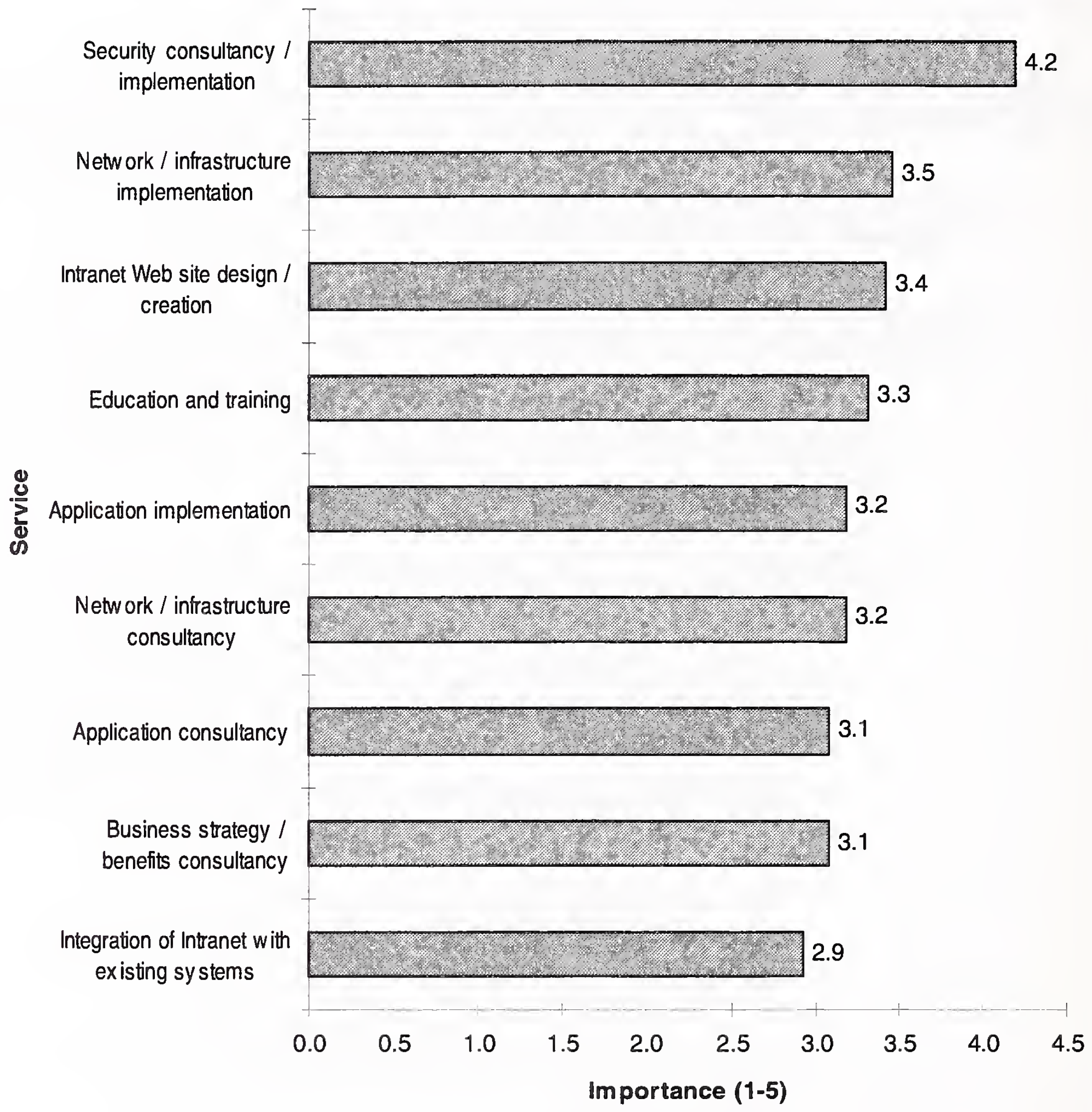
The services perceived as most important by all users are implementation services. The services perceived as least important are nearly all consultancy services. While those interviewed, IT managers, will naturally place a different level of importance of services than would other senior-level employees within organisations, IS departments play the most active roles in Intranet development and contribute the greatest proportion of Intranet budgets.

The most important services overall are:

- Security consultancy / implementation
- Network / infrastructure implementation
- Intranet Web site design / creation
- Application implementation

Exhibit VII-12

Importance of External Intranet Services (Intranet Owners)

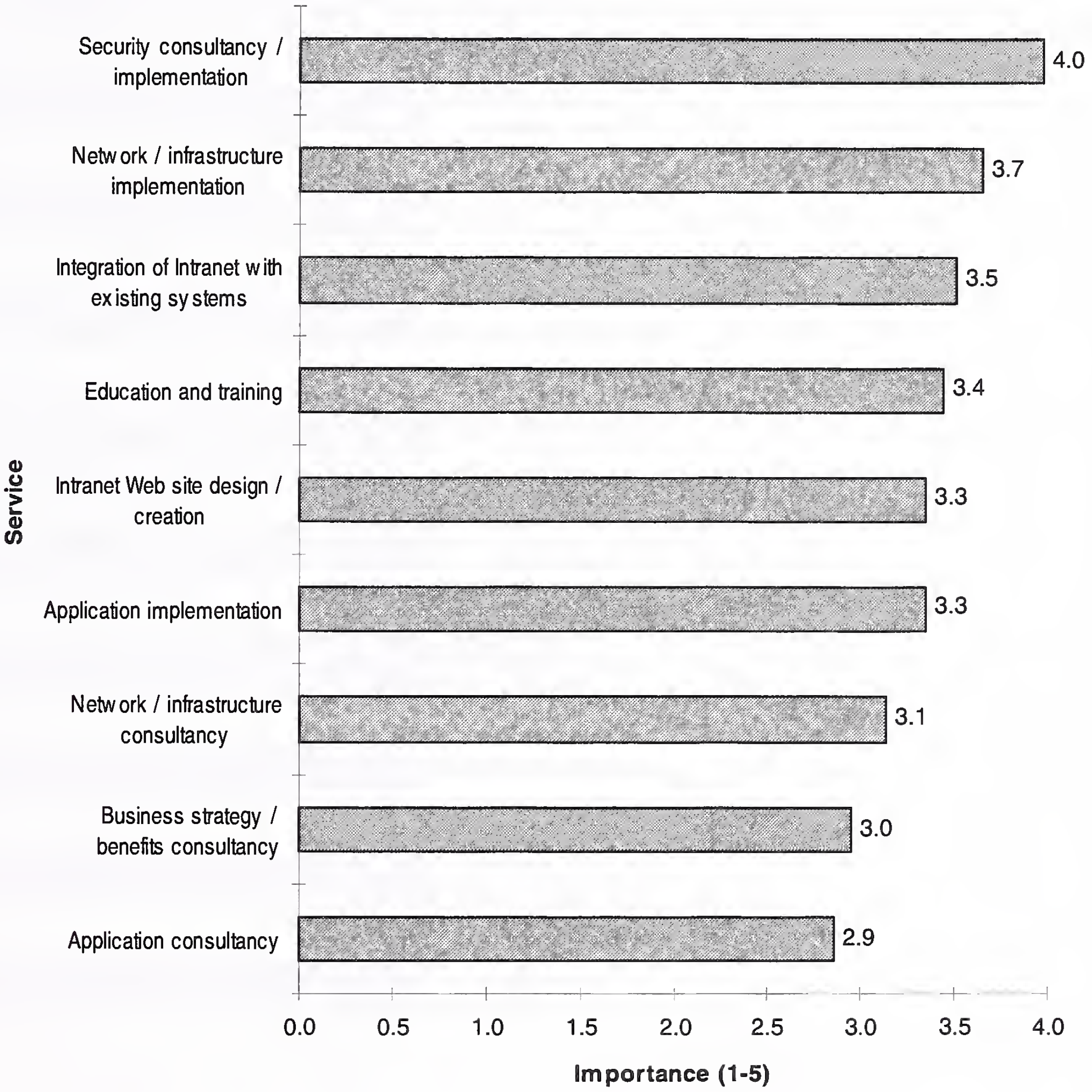


Sample: 26

Source: INPUT

Exhibit VII-13

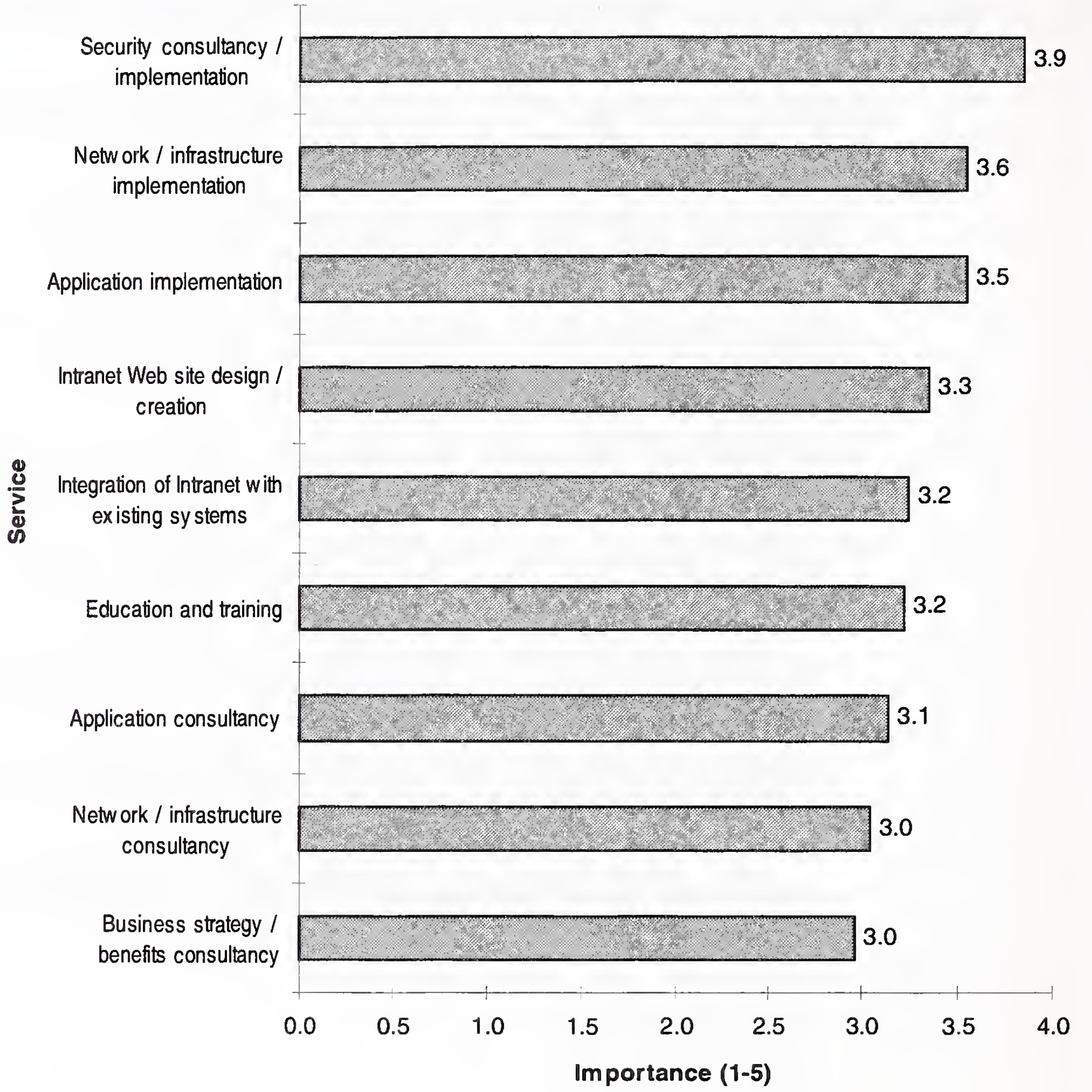
Importance of External Intranet Services (Intranet Builders)



Sample: 43 *Source: INPUT*

Exhibit VII-14

Importance of External Intranet Services (Intranet Evaluators)



Sample: 160 *Source: INPUT*

2. By Industry

Exhibit VII-15 shows the importance each industry sector attaches to individual Intranet services.

Exhibit VII-15

Importance of External Intranet Services (by Industry)

Service	Industry Sectors	Import-ance (1-5)	Service	Industry Sectors	Import-ance (1-5)
Business strategy / benefits consultancy	**Services**	**3.5**	Network / infrastructure consultancy	**Insurance**	**3.9**
	Government	3.1		Services	3.2
	Process mfg	3.1		Process mfg	3.1
	Banking/finance	3.1		Banking/finance	3.0
	Insurance	3.0		Retail	2.9
	Discrete mfg	2.7		Discrete mfg	2.9
	Retail	2.6		Government	2.8
Network / infrastructure implementation	**Insurance**	**3.9**	Application consultancy	**Insurance**	**3.5**
	Retail	3.6		Retail	3.3
	Government	3.6		Services	3.2
	Discrete mfg	3.6		Banking/finance	3.1
	Banking/finance	3.5		Process mfg	3.1
	Services	3.5		Government	2.9
	Process mfg	3.5		Discrete mfg	2.9
Application implementation	**Retail**	**3.8**	Intranet Web site design / creation	**Discrete mfg**	**3.7**
	Discrete mfg	3.6		Insurance	3.7
	Insurance	3.5		Process mfg	3.5
	Services	3.4		Banking/finance	3.3
	Process mfg	3.3		Government	3.3
	Government	3.3		Services	3.2
	Banking/finance	3.3		Retail	2.9
Integration of Intranet with existing systems	**Services**	**3.5**	Security consultancy / implementation	**Retail**	**4.3**
	Retail	3.4		Discrete mfg	4.2
	Discrete mfg	3.2		Banking/finance	4.1
	Banking/finance	3.1		Insurance	4.1
	Insurance	3.0		Services	3.9
	Process mfg	3.0		Process mfg	3.7
	Government	2.9		Government	3.7
Education and training	**Retail**	**3.6**			
	Services	3.5			
	Banking/finance	3.3			
	Discrete mfg	3.3			
	Government	3.2			
	Process mfg	3.1			
	Insurance	2.9			

Source: INPUT

C

Satisfaction With External Intranet Services

Among both Intranet Owners and Builders, not enough responses were available to present statistically.

For completeness, Exhibits VII-16 and VII-17 show Owners' and Builders' satisfaction ratings by service type. Exhibit VII-18 shows Owners' and Builders' satisfaction ratings by vendor.

Exhibit VII-16

Satisfaction With External Intranet Services (Intranet Owners)

Service	Satisfaction (Number of mentions: 1=not satisfied, 5=very satisfied)				
	1	2	3	4	5
Business strategy / benefits consultancy			3	3	
Network / infrastructure consultancy			1	3	
Network / infrastructure implementation			2	2	
Application consultancy			3	1	1
Application implementation				3	1
Intranet Web site design / creation			1		1
Integration of Intranet with existing systems	1		1	2	1
Security consultancy / implementation			1	3	1
Education and training					

Source: INPUT

Exhibit VII-17

Satisfaction With External Intranet Services (Intranet Builders)

Service	Satisfaction (Number of mentions: 1=not satisfied, 5=very satisfied)				
	1	2	3	4	5
Business strategy / benefits consultancy			4	2	
Network / infrastructure consultancy			5	4	
Network / infrastructure implementation			2	5	
Application consultancy			1		1
Application implementation				2	1
Intranet Web site design / creation			2	1	
Integration of Intranet with existing systems		1	1	2	
Security consultancy / implementation				1	1
Education and training				1	1

Source: INPUT

Exhibit VII-18

Satisfaction With External Intranet Services (by Vendor)

Service	Vendor	Satisfaction (Individual ratings: 1=not satisfied, 5=very satisfied) Intranet Owners	Satisfaction (Individual ratings: 1=not satisfied, 5=very satisfied) Intranet Builders
Business strategy / benefits consultancy	Sema	4	
	ICT	3	
	FI Group	3	
	Andersen	4	4
	IBM		3
	Digital Associate		3
	CFM		4
	Hoskyns		3
Network / infrastructure consultancy	ComputaCentre	4	
	MCI	3	
	SDA	4	
	IBM		3, 3, 4
	Burns Manchester		3
	BT		4
	Anite		4
	Digital		4
Network / infrastructure implementation	First Point	4	
	MCI	3	
	SDA	3	
	IBM		3, 4
	North Data		3
	Andersen		4
	BT		4
	Anite/SHL		4
	Digital		4
Application consultancy	CMG	3	
	Sun	4	
	FI Group	5	
	Oracle/Sequent	3	
	FI Group		5
Application implementation	Sun	4	
	FI Group	5	
	MSC	4	
	SMS		4
	Pinnacle		5
Intranet Web site design / creation	Isocor		4
Integration of Intranet with existing systems	CMG/ITnet	4	
	Newell & Budge	4	
	Data Sciences	3	
	Andersen		4
	Oracle		4
Security consultancy / implementation	Andersen	4	5
Education and training	Digital		5

Source: INPUT

Only two respondents gave an opinion on their service provider:

- Medium-sized services-only vendor—"Did not co-operate well with other suppliers"
- Large product and services vendor—"Still very proprietary in their approach. Very reluctant to use third-party offerings"

D

Intranet Service Provider Preferences: One-Stop-Shop or Mix-And-Match

1. By Current Intranet Status

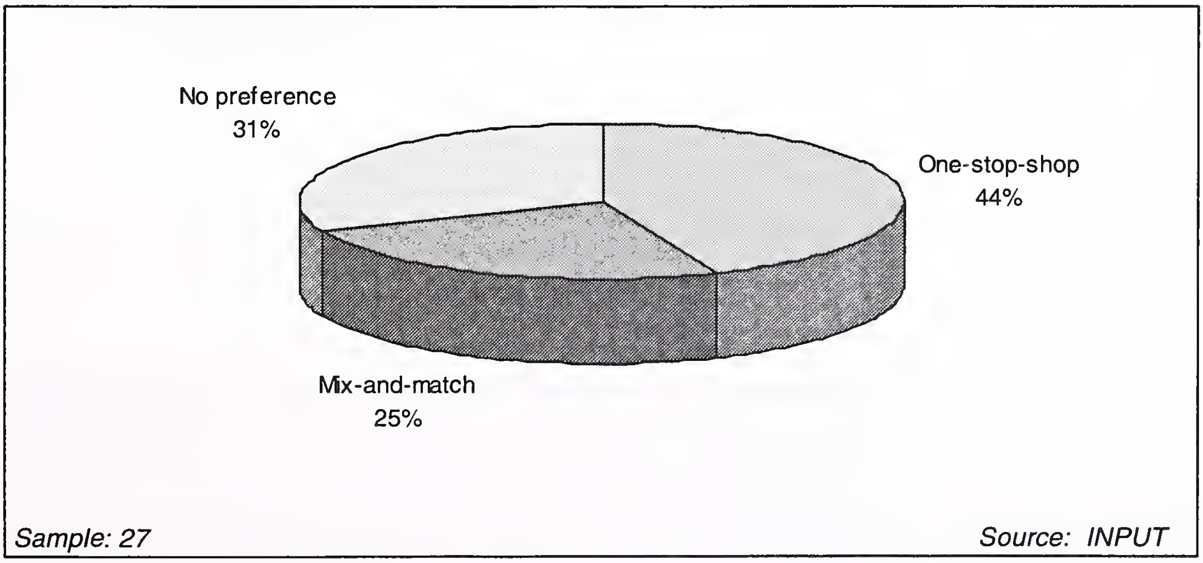
Exhibits VII-19, VII-20 and VII-21 show the preferences of Owners, Builders and Evaluators respectively for a "one-stop-shop" or a "mix-and-match" approach to external Intranet services.

The relatively few Owners (16) who gave an answer were in accordance with other types of respondent in preferring a one-stop-shop approach (44%), but fewer favoured a mix-and-match approach and a greater proportion had no preference.

Builders and Evaluators displayed the same preferences. Slightly more favoured a mix-and-match approach, although the difference was not great. Only a small number of respondents in both cases stated no preference. Both approaches appear equally likely, therefore, to be received well in the marketplace.

Exhibit VII-19

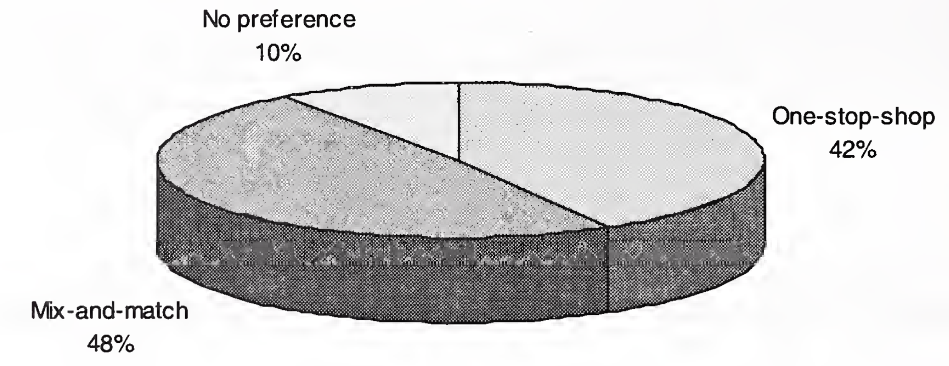
Intranet Service Provider Preferences (Intranet Owners)



Sample: 27 Source: INPUT

Exhibit VII-20

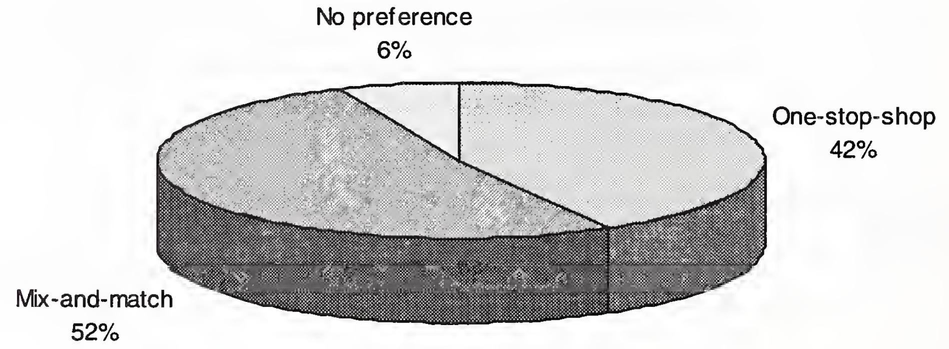
Intranet Service Provider Preferences (Intranet Builders)



Sample: 51 *Source: INPUT*

Exhibit VII-21

Intranet Service Provider Preferences (Intranet Evaluators)



Sample: 160 *Source: INPUT*

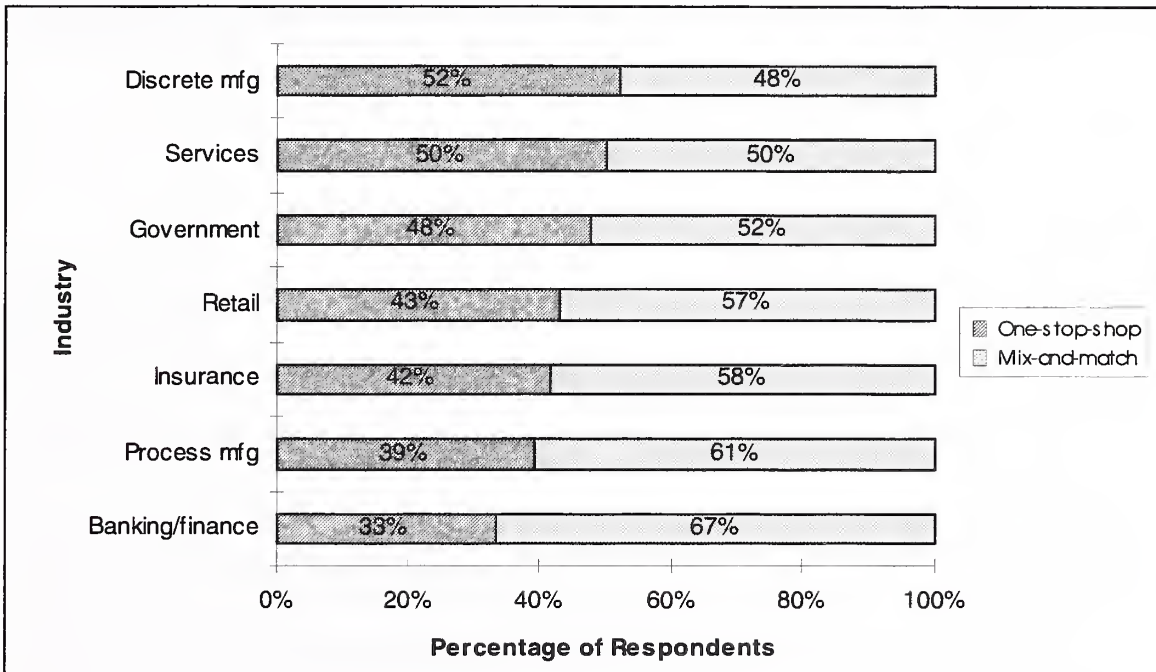
2. By Industry

Exhibit VII-22 shows the preferences of specific industry sectors for a one-stop-shop or a mix-and-match approach to external Intranet services.

Overall, users prefer to pick services from a free range of suppliers, particularly so in banking and finance (although it should be noted the banking and finance industry sample was small, at 14 respondents). Discrete manufacturing favours more than other industries a single-supplier solution, which reflects the all-in-one packaged nature of much IT in manufacturing, SAP R/3 being the notable example. The process manufacturing industry, however, which was not SAP's primary focus when developing R/2 and R/3, displays the opposite tendency.

Exhibit VII-22

Intranet Service Provider Preferences (by Industry)



Sample: 193 *Source: INPUT*

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VIII

Beyond Development: Applications and Outsourcing

A

Intranet Applications Used

Exhibits VIII-1, VIII- and VIII-3 show the applications used, or expected to be used, by Intranet Owners, Builders and Evaluators respectively.

Intranet use is still less advanced than the current hyperbole surrounding them would suggest. The clear majority of organisations use their Intranet for “phase one” activities (static information distribution), and a much smaller proportion use their Intranet for anything else. Much of the discussion about Intranets among vendors and in IT publications is about their transition from Web browser-fronted data repositories to interactive application platforms, yet the findings presented here show that this transition has yet to take place.

It might be expected that Owners whose Intranets were developed in the early days of Intranet adoption have not changed their applications greatly, but the fact that Evaluators expect to use the same applications in similar proportions is a strong indicator that Intranets are still seen as non-interactive repositories rather than full-function application environments.

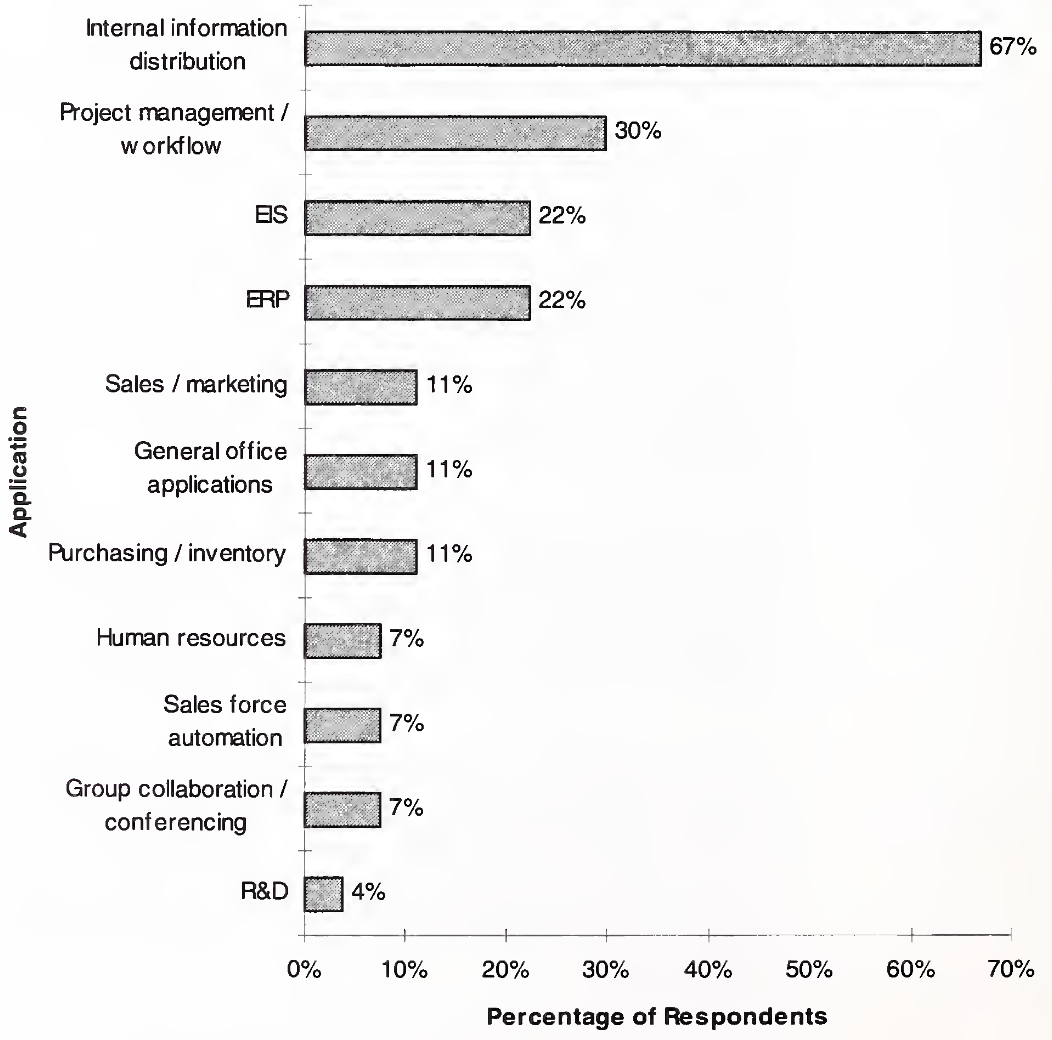
It is inevitable that awareness not only of Intranet technology and products but also of their potential is lower among users than among vendors involved in shaping the Intranet market. Additionally, vendors should note that the gap in awareness and understanding between them and their future customers is a wide one, and does not appear to be diminishing with any great speed.

Of organisations who are using or who expect to use their Intranets for applications more advanced than information distribution, project management/workflow and EIS applications are most common. Both applications rely heavily on combining and distilling data of several types, either from a central source or from multiple sources. In addition, both applications are often specific to specialist staff (for example, project co-ordinators and business development analysts) as opposed to generic to all staff.

Group collaboration/conferencing is not currently, or expected to be, as widely used as project management/workflow. Both are central elements of many groupware applications, which INPUT expects to migrate particularly rapidly to the Intranet platform. This migration is due to targeting by groupware vendors (most notably Lotus with the Notes/Domino package) and the network-centricity of groupware—unlike many other applications, groupware is fundamentally a networked application, and the groupware genre could not exist in a standalone environment.

Exhibit VIII-1

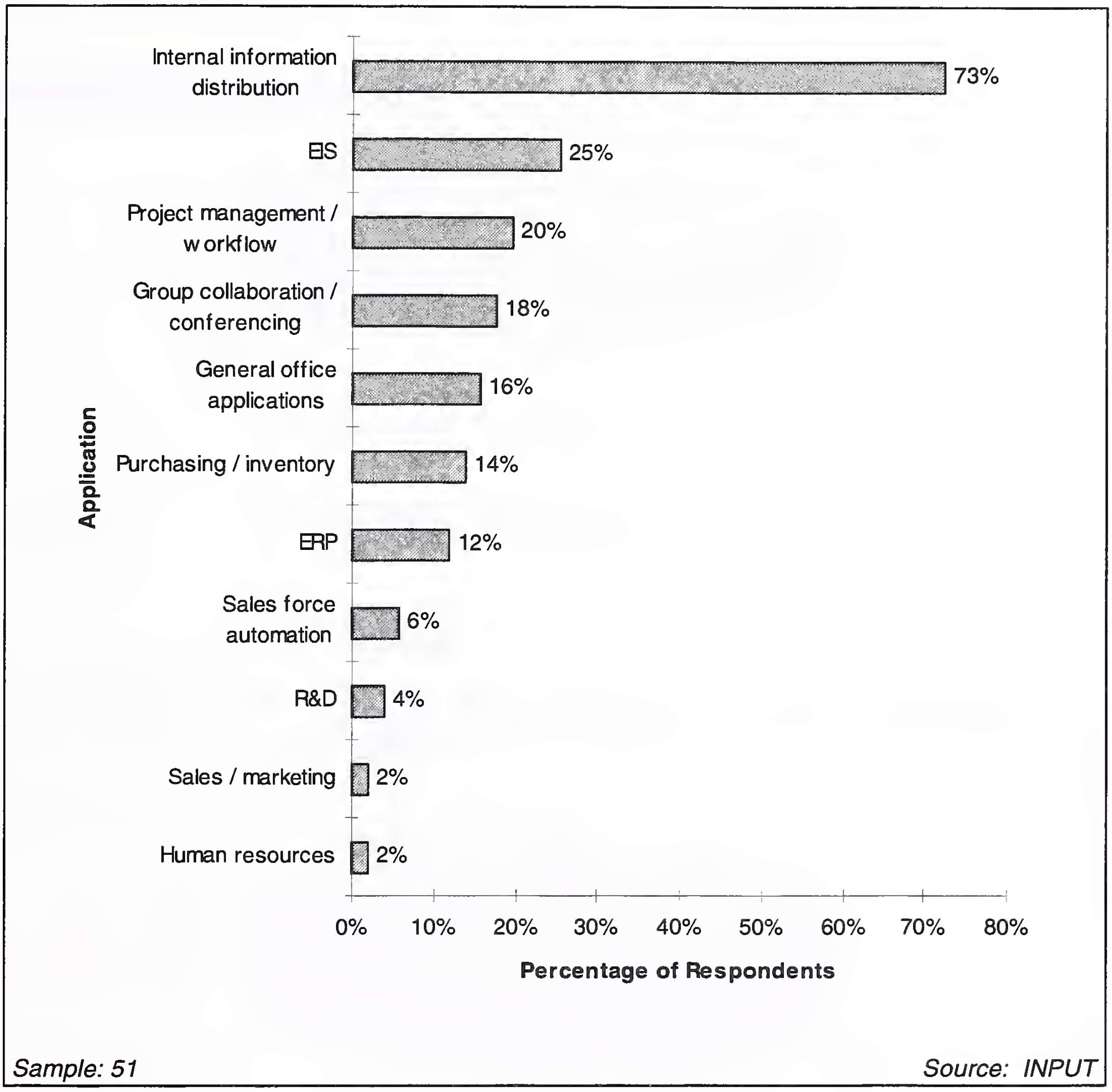
Applications Used (Intranet Owners)



Sample: 27 *Source: INPUT*

Exhibit VIII-2

Applications to be Used (Intranet Builders)

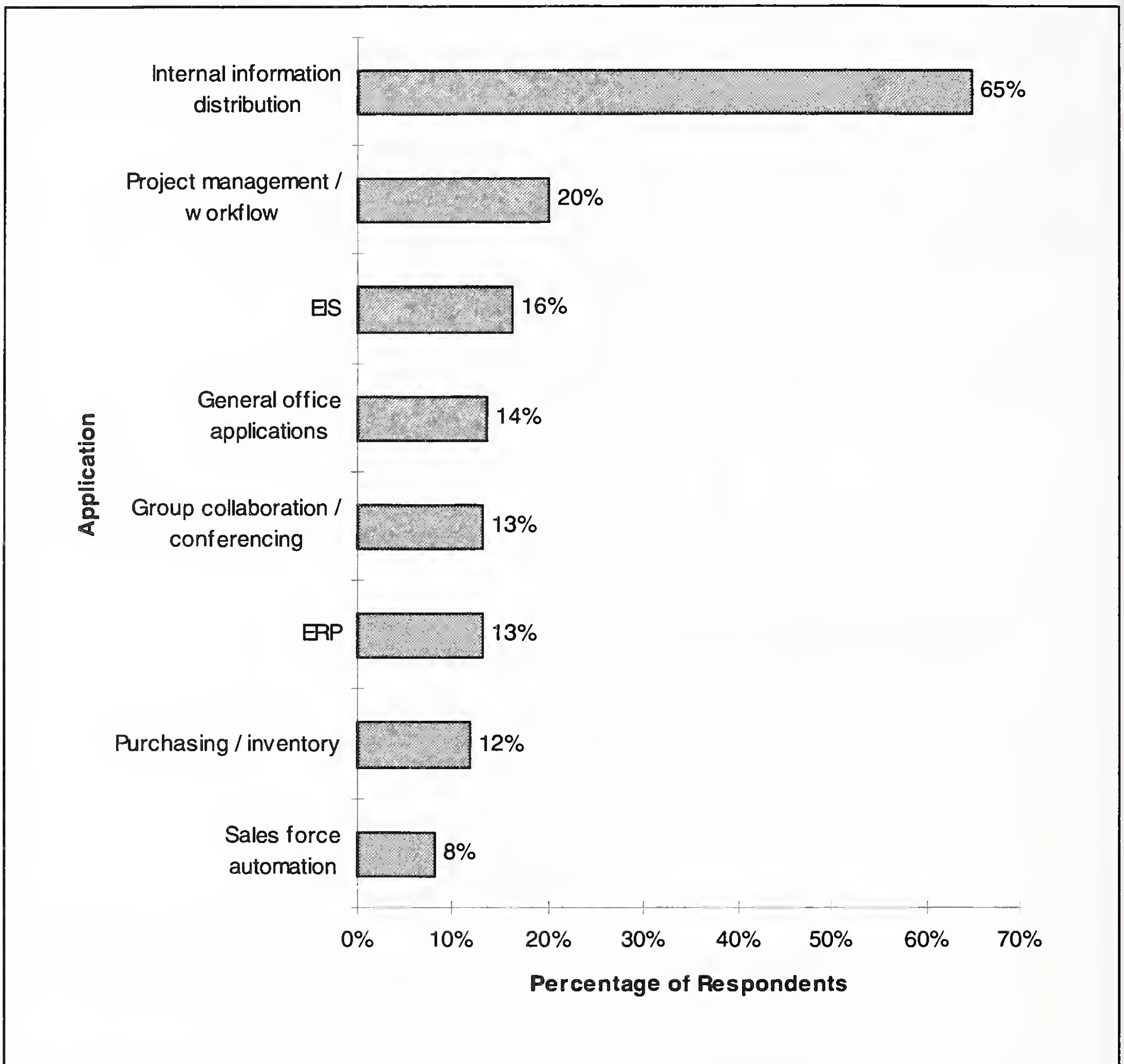


Sample: 51

Source: INPUT

Exhibit VIII-3

Applications Expected to be Used (Intranet Evaluators)



Sample: 160 *Source: INPUT*

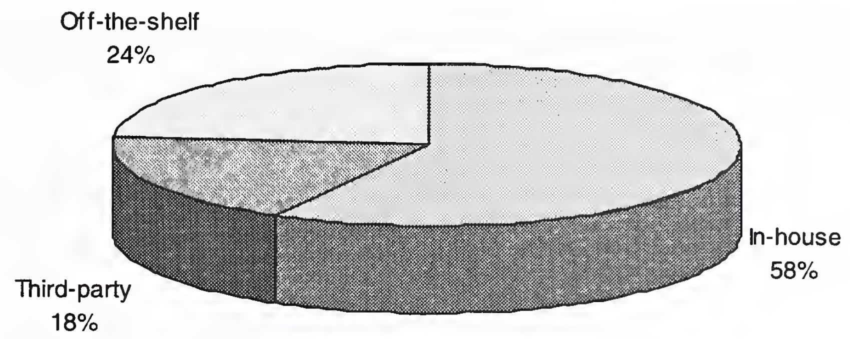
B

Source of Intranet Applications

Exhibits VIII-4 and VIII-5 show the sources of applications used by Owners and Builders respectively. The breakdown is very similar: most organizations develop Intranet applications in-house and approximately equal numbers use third-party application developers or buy shrink-wrapped packages. INPUT expects the proportion of applications developed in-house to decrease over time, as the availability and quality of packaged Intranet applications increase.

Exhibit VIII-4

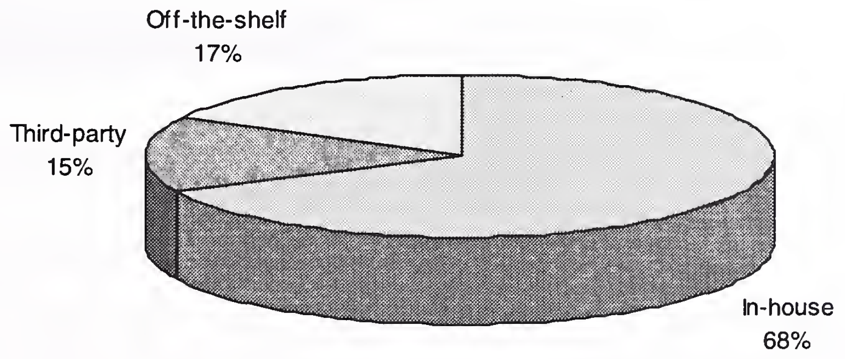
Sources of Intranet Applications (Intranet Owners)



Sample: 22 *Source: INPUT*

Exhibit VIII-5

Sources of Intranet Applications (Intranet Builders)



Sample: 41 *Source: INPUT*

C

Intranet Management Tools

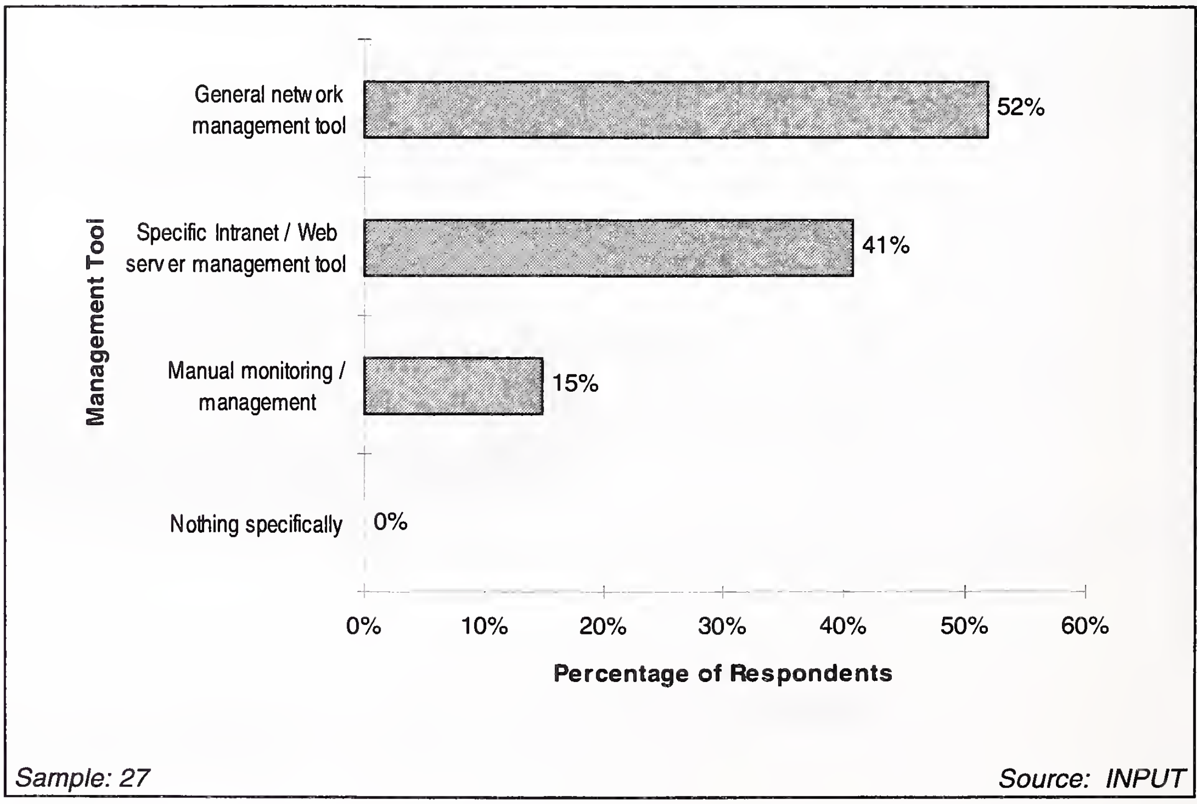
Exhibits VIII-6 and VIII-7 show the tools used by Owners and Builders respectively to manage their Intranet. Tools include traffic volume monitoring, IP address management, and Web site management tools.

The results are the same in both cases: general-purpose network management tools are most common, although over a third of respondents of both types use a tool designed specifically for Intranet management.

Two Owners and two Builders use only manual monitoring and management and do not use any automated tool. One Builder currently uses no form of Intranet management.

Exhibit VIII-6

Intranet Management Tools Used (Intranet Owners)

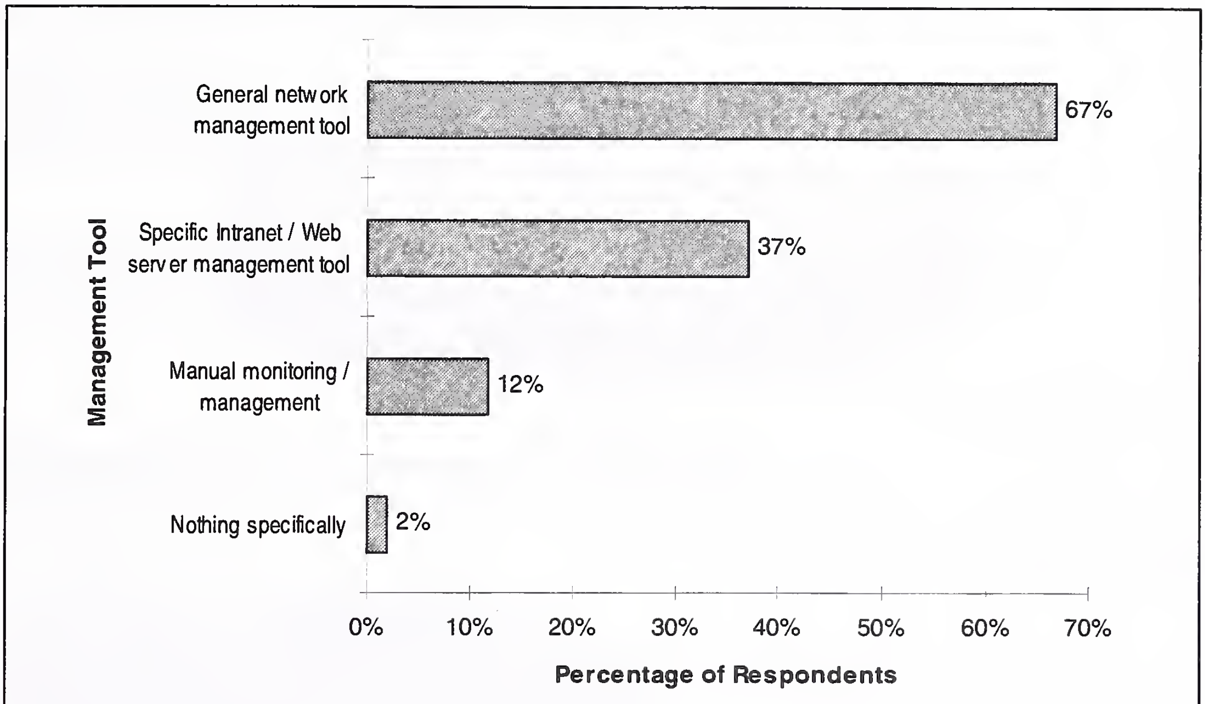


Sample: 27

Source: INPUT

Exhibit VIII-7

Intranet Management Tools Used (Intranet Builders)



Sample: 51 *Source: INPUT*

D
Intranet Outsourcing Intentions

1. By Current Intranet Status

Exhibits VIII-8, VIII-9 and VIII-10 show the proportion of Owners, Builders and Evaluators respectively who intend to outsource their Intranet. Outsourcing intentions are almost identical across all categories of respondent. Only between seven and 12% intend to outsource, and only between six and 11% did not have a view. Note that the majority of respondents in each case who stated they did not intend to outsource their Intranet are not committed permanently to running their Intranet in-house, but that they currently have no intentions to outsource it. Their intentions may change as their circumstances change, for example when their Intranets are operational.

Users currently considering whether or not to build an Intranet gave the following comments on the outsourcing issue:

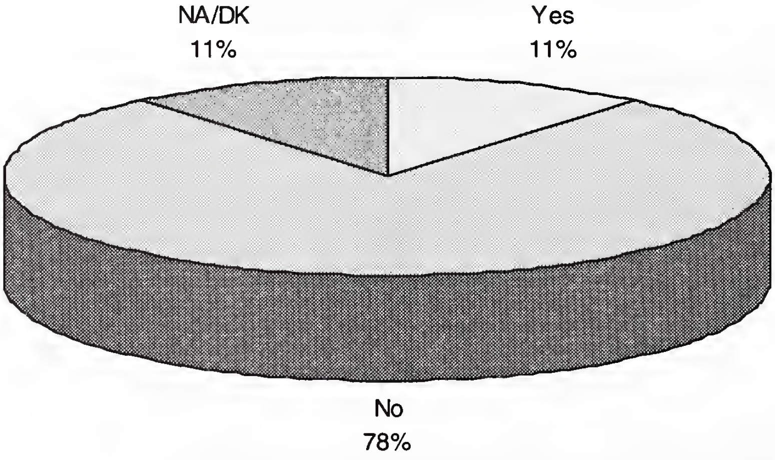
- “Depends upon the economics and if cost argument is there”

- “Have outsourced many IT functions, but Intranet would be long term”
- “We are outsourcing datacentre operations on our WAN services”
- “We would not set out to use external services for implementation. Once the system was operational, we would look at outsourcing if it was financially sound”

It should be noted that the views expressed reflect the nature of the respondents, IT Directors, who may not be representative of their organisation overall in this issue.

Exhibit VIII-8

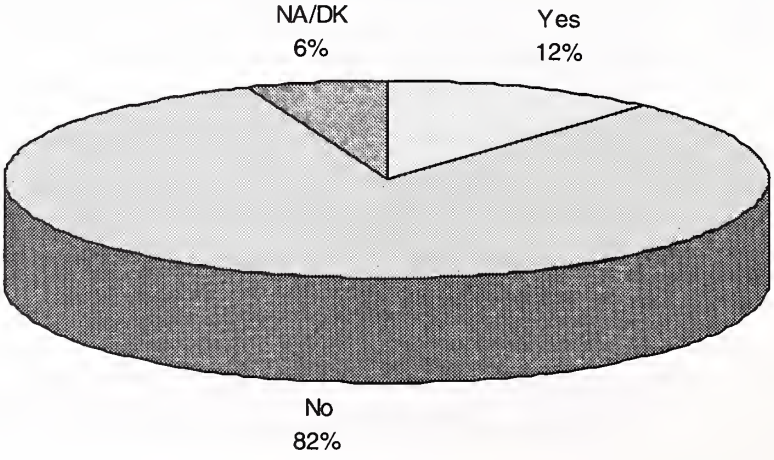
Intention to Outsource Intranet (Intranet Owners)



Sample: 27 *Source: INPUT*

Exhibit VIII-9

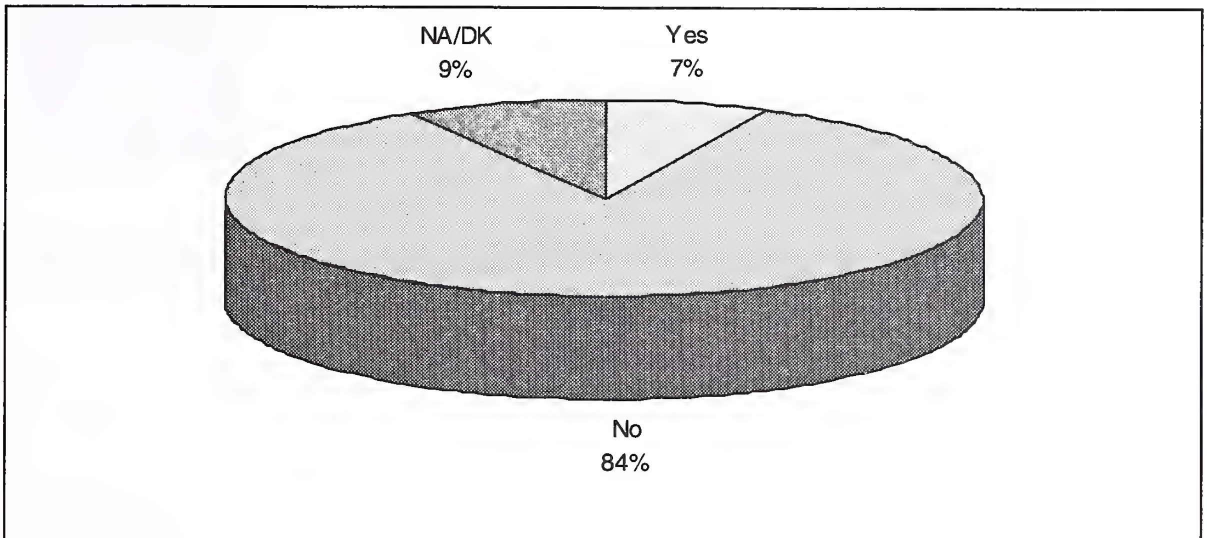
Intention to Outsource Intranet (Intranet Builders)



Sample: 51 *Source: INPUT*

Exhibit VIII-10

Intention to Outsource Intranet (Intranet Evaluators)



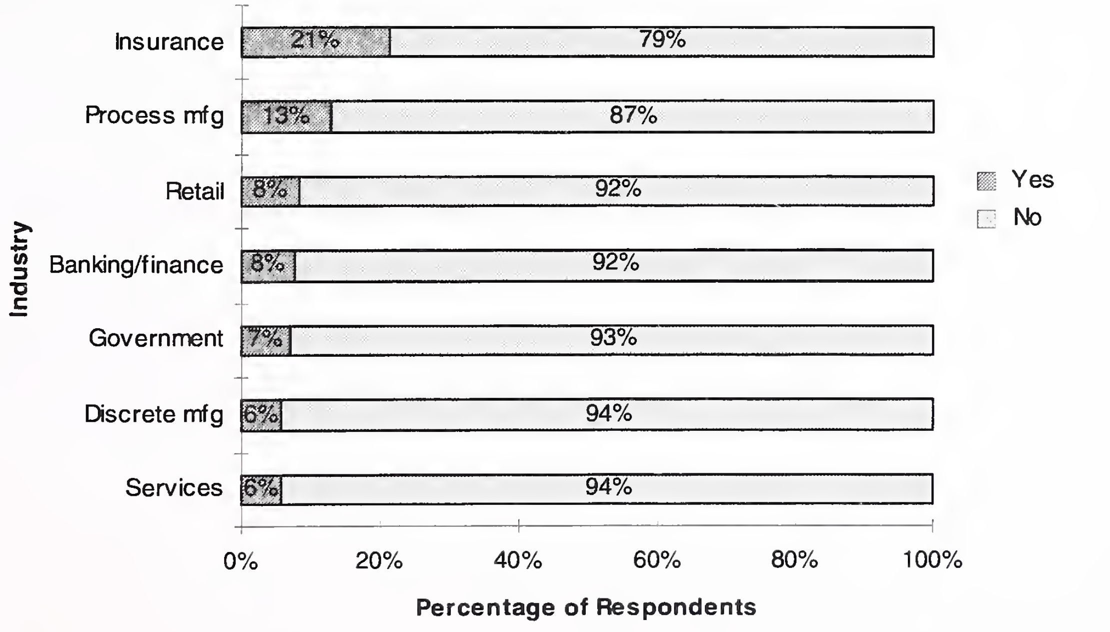
Sample: 160 Source: INPUT

2. By Industry

Exhibit VIII-11 shows the levels of intention to outsource Intranets for specific industry sectors. The insurance industry is notably more likely than others to perform Intranet outsourcing, reflecting that industry's tendency since the mid-1990s to outsource IT functions (particularly applications) as observed in previous INPUT surveys.

Exhibit VIII-11

Intention to Outsource Intranet (by Industry)



Sample: 193 Source: INPUT

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IX

Extent of Intranet Deployment

A

Scope of Intranet

Most Intranets which are already in place or which are currently being built appear not be to small pilots but sizeable installations that encompass a significant proportion of employees.

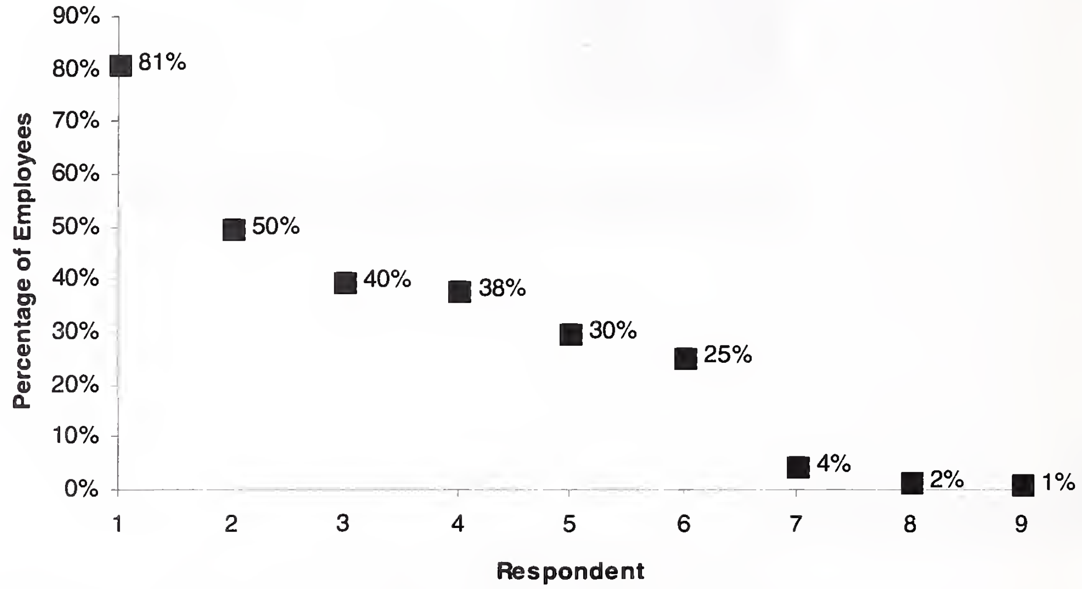
Owners and Builders were asked to estimate the number of employees able to access their Intranet as a proportion of all employees. The median proportion stated was approximately 30% in both cases, although there was maximum variation in responses (from one percent to 100%). Other respondents who estimated their Intranet's reach within the organisation stated that it was, or would be available 'company-wide' or 'UK-wide', although they did not place a figure on the proportion of employees able to access it.

Fifteen Owners estimated the extent of their Intranet's reach:

- Nine Owners estimated Intranet availability as a percentage of all employees (Exhibit IX-1 shows the breakdown by respondent)
- Three Owners stated their Intranet had worldwide reach
- Three Owners stated their Intranet had UK-wide reach

Exhibit IX-1

Scope of Intranet Availability (Intranet Owners)



Average: 30%

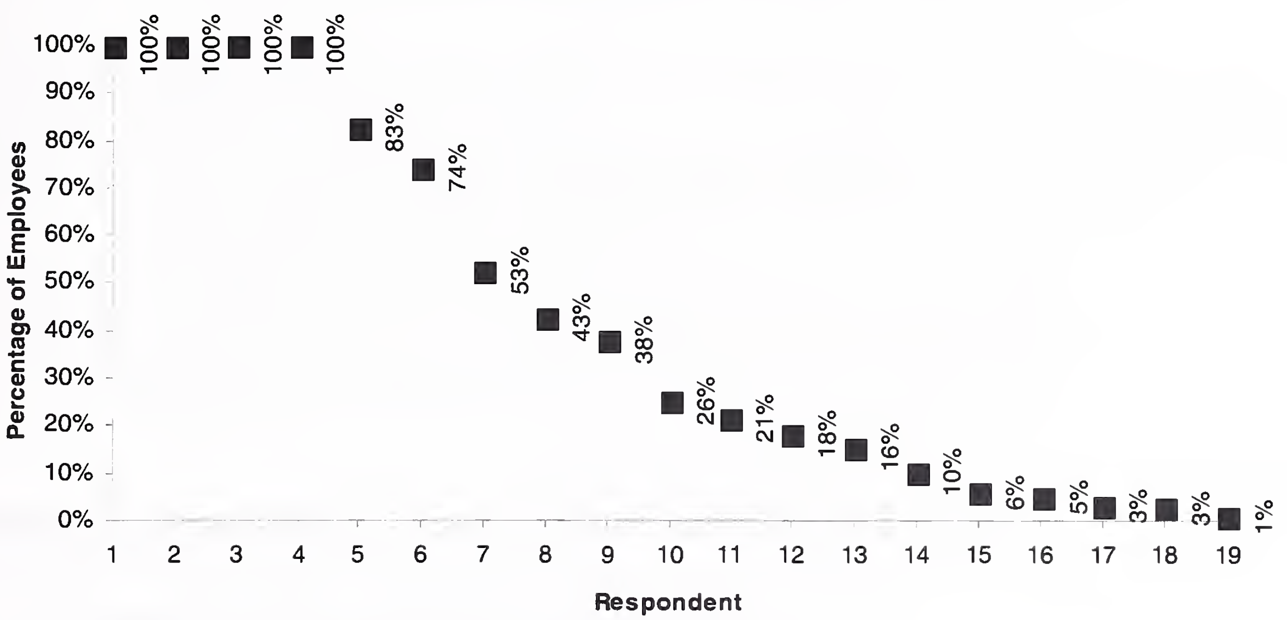
Sample: 9 *Source: INPUT*

Twenty nine Builders estimated the extent of their Intranet's reach:

- Nineteen Builders estimated Intranet availability as a percentage of all employees (Exhibit IX-2 shows the breakdown by respondent)
- Seven Builders stated their Intranet will have worldwide reach
- One Builder stated their Intranet will have UK-wide reach
- One Builder stated their Intranet will have Europe-wide reach
- One Builder stated their Intranet will be made available to existing PC users only, and extended to other users at a later time

Exhibit IX-2

Scope of Intranet Availability (Intranet Builders)



Average: 42%

Sample: 19

Source: INPUT

B

Departments Benefited from Intranet

1. By Current Intranet Status

Exhibits IX-3, IX-4 and IX-5 show which departments within Intranet Owner, Builder and Evaluator organisations respectively have benefited or are expected to benefit most from an Intranet.

In all cases, administrative departments are, by a significant margin, the greatest beneficiaries. This indicates that real-world use of Intranets is still largely in 'phase one': static internal information distribution (for example: company policy documents, staff and telephone directories, visitor registers). As awareness among users of Intranets and the benefits they can bestow increases, and as Intranet technology gains functionality and becomes easier to use, administrative departments will decreasingly be seen as those most likely to benefit.

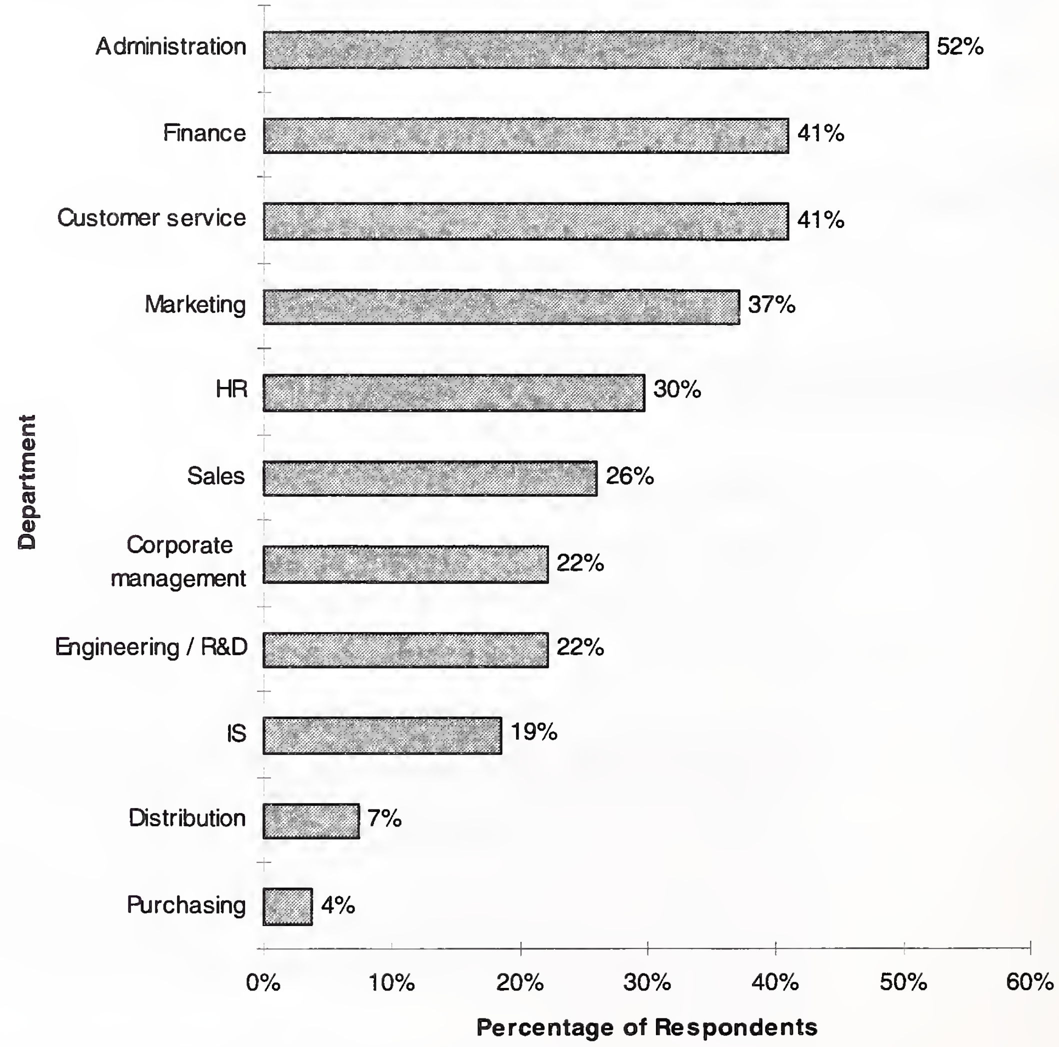
Non-technical and customer-facing departments such as Finance, HR, Marketing, Sales and Customer Service are seen as the next greatest beneficiaries. When respondents were asked to name the sources of their

Intranet budgets, Marketing and Finance were the departments most often named as realising the greatest benefits from an Intranet (and, therefore, expecting to contribute towards its funding).

Technical and logistical departments, such as Engineering/R&D, IS, Distribution and Purchasing, currently benefit less significantly from an Intranet. Again, as Intranet awareness increases and Intranet software developers target specific applications, these departments will be expected to benefit more than they do currently, and there exists therefore an opportunity for Intranet application developers to target these areas. INPUT believes that the current perceived lack of benefits realisable by those departments is due in part to the current state of the Intranet market, not to the impact that Intranets may have on them in the long term.

Exhibit IX-3

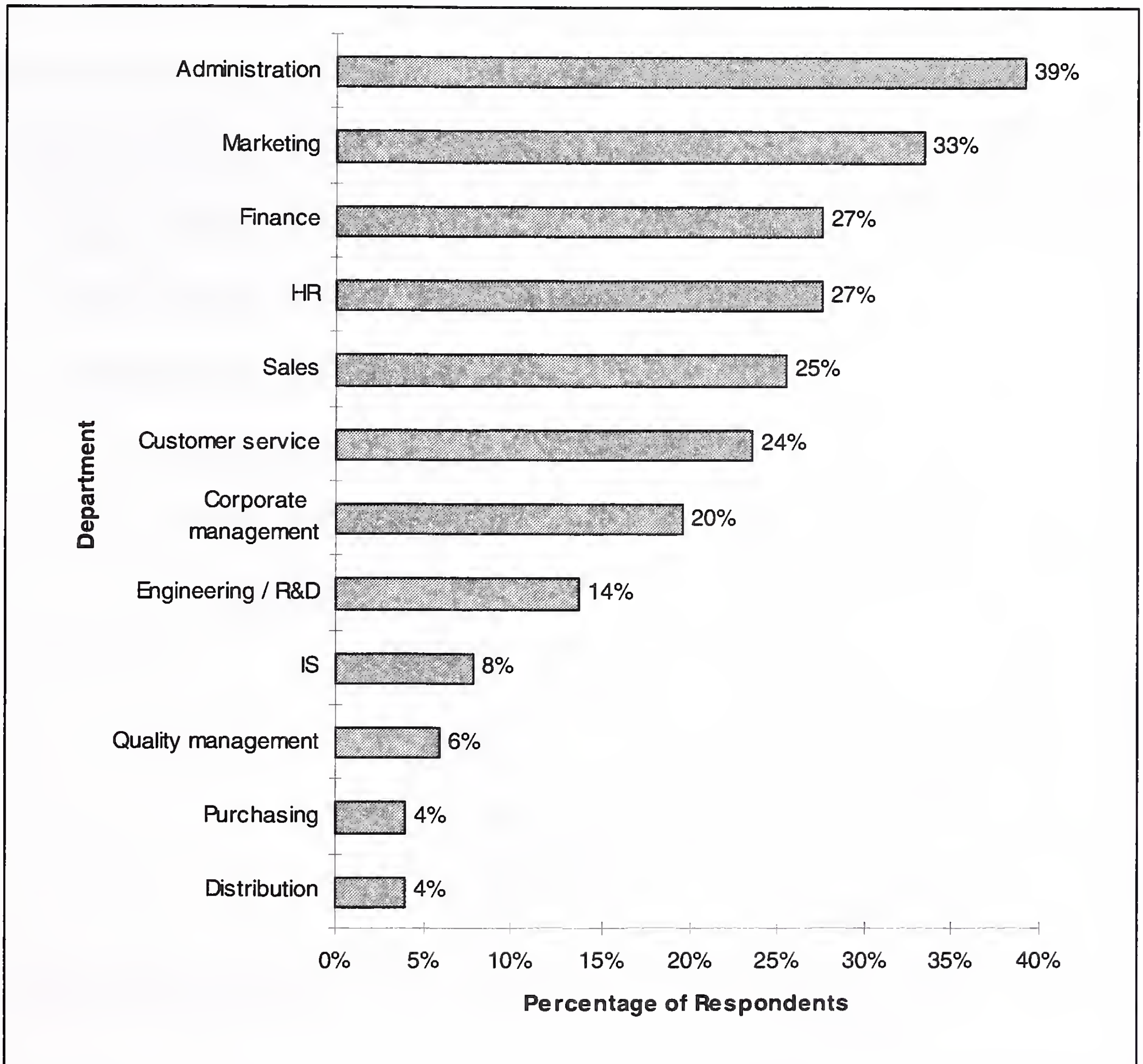
Departments Benefited From Intranet (Intranet Owners)



Sample: 27 *Source: INPUT*

Exhibit IX-4

Departments Expected to Benefit From Intranet (Intranet Builders)

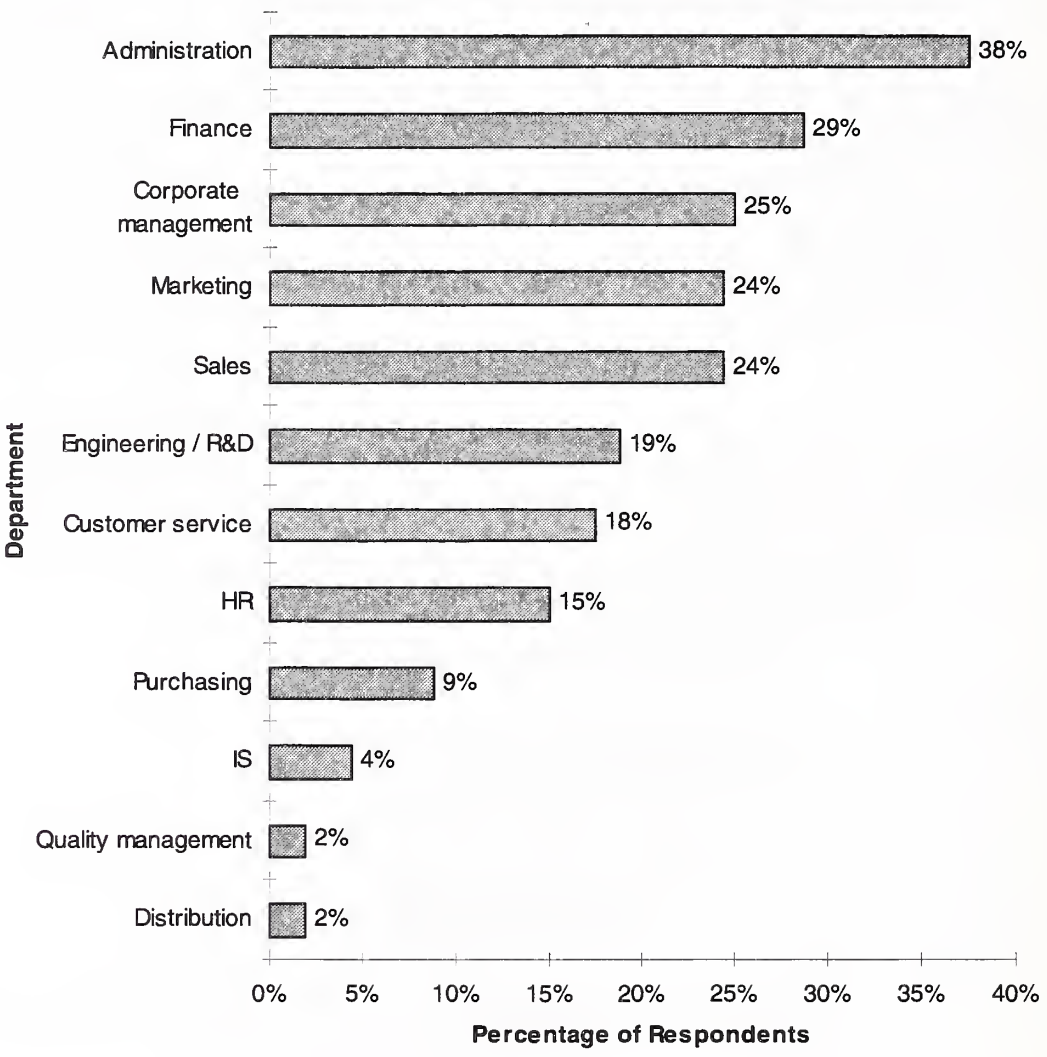


Sample: 51

Source: INPUT

Exhibit IX-5

Departments Expected to Benefit From Intranet (Intranet Evaluators)



Sample: 160 *Source: INPUT*

2. By Industry

Exhibits IX-7 to IX-13 show which departments within specific industry sectors have benefited or are expected to benefit most from an Intranet. The figures presented for each industry are those of the categories pre-defined in the survey questionnaire and do not include “Other” responses.

Departments benefting from an Intranet differ between industries. Exhibit IX-6 shows for specific industry sectors which departments are benefited more or less than average.

As might be expected, Engineering/R&D functions gain more benefit from Intranets in the manufacturing industries than in other industries.

Respondents from neither Retail nor Services expected any department to benefit considerably above average, although Marketing and Sales were among the top three in both cases.

Exhibit IX-6

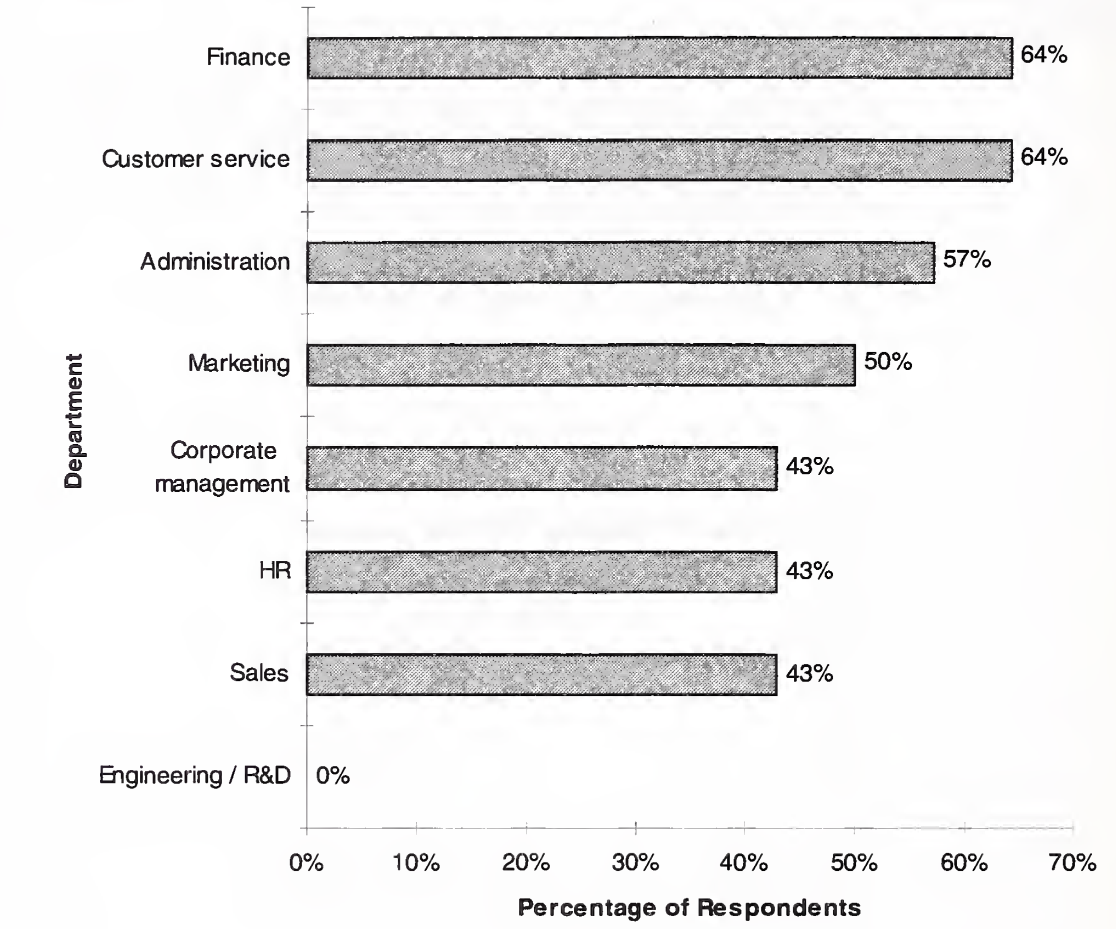
Departments Benefited by Intranet (by Industry)

Industry Sector	More Benefited Departments	Less Benefited Departments
Banking and finance	Sales Customer service HR Corporate management Finance	Engineering/R&D
Discrete manufacturing	Engineering/R&D	Customer service Administration
Government	Administration	Sales Marketing Customer service Engineering/R&D
Insurance	Customer service	Administration Engineering/R&D
Process manufacturing	Engineering/R&D	Customer service Administration
Retail	—	HR Administration Engineering/R&D
Services	—	Corporate management

Source: *INPUT*

Exhibit IX-7

Departments Benefited From Intranet (Banking and Finance)

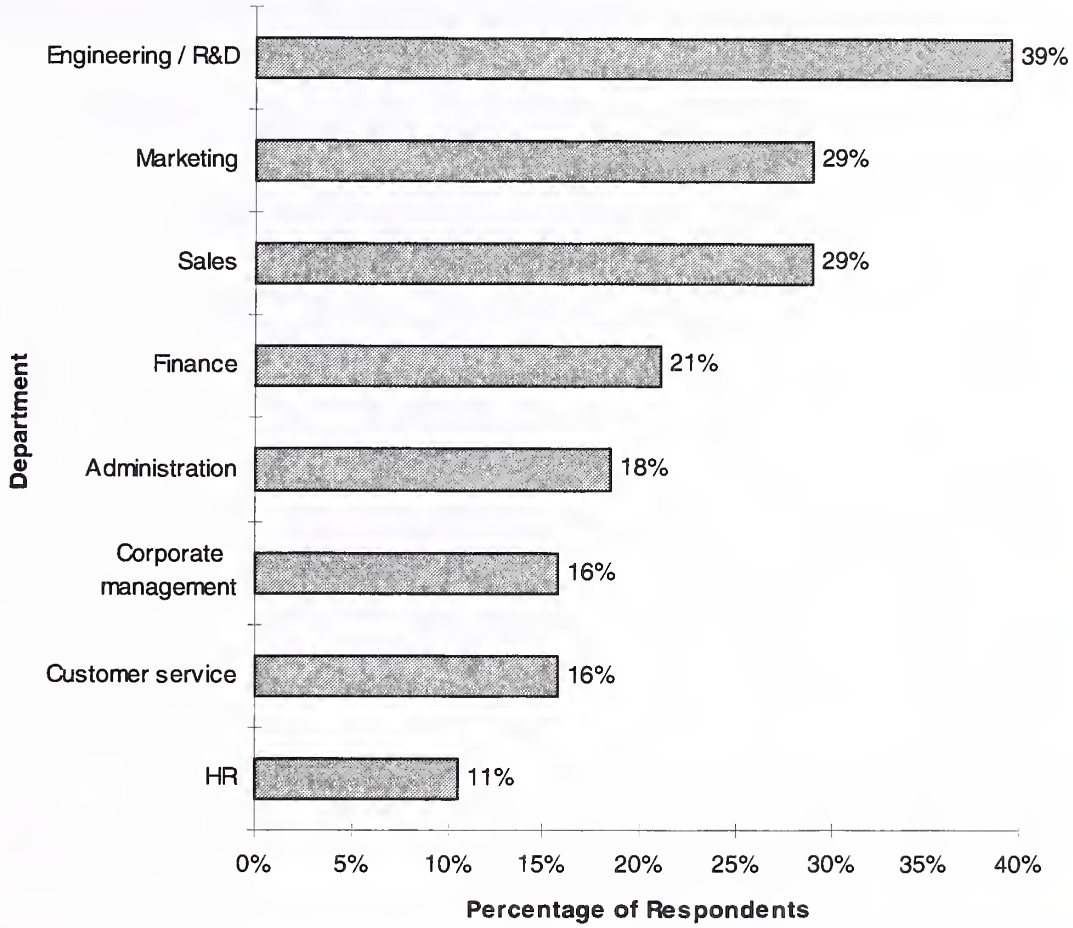


Sample: 14

Source: INPUT

Exhibit IX-8

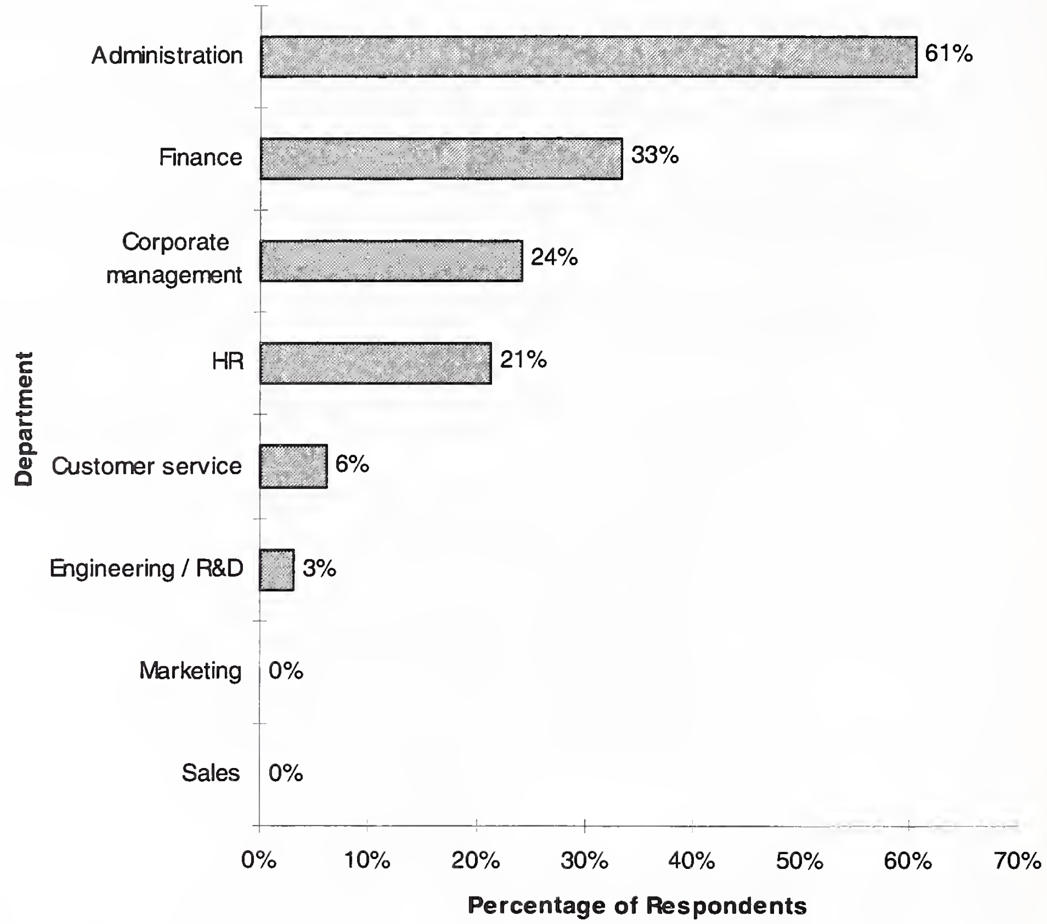
Departments Benefited From Intranet (Discrete Manufacturing)



Sample: 38 *Source: INPUT*

Exhibit IX-9

Departments Benefited From Intranet (Government)

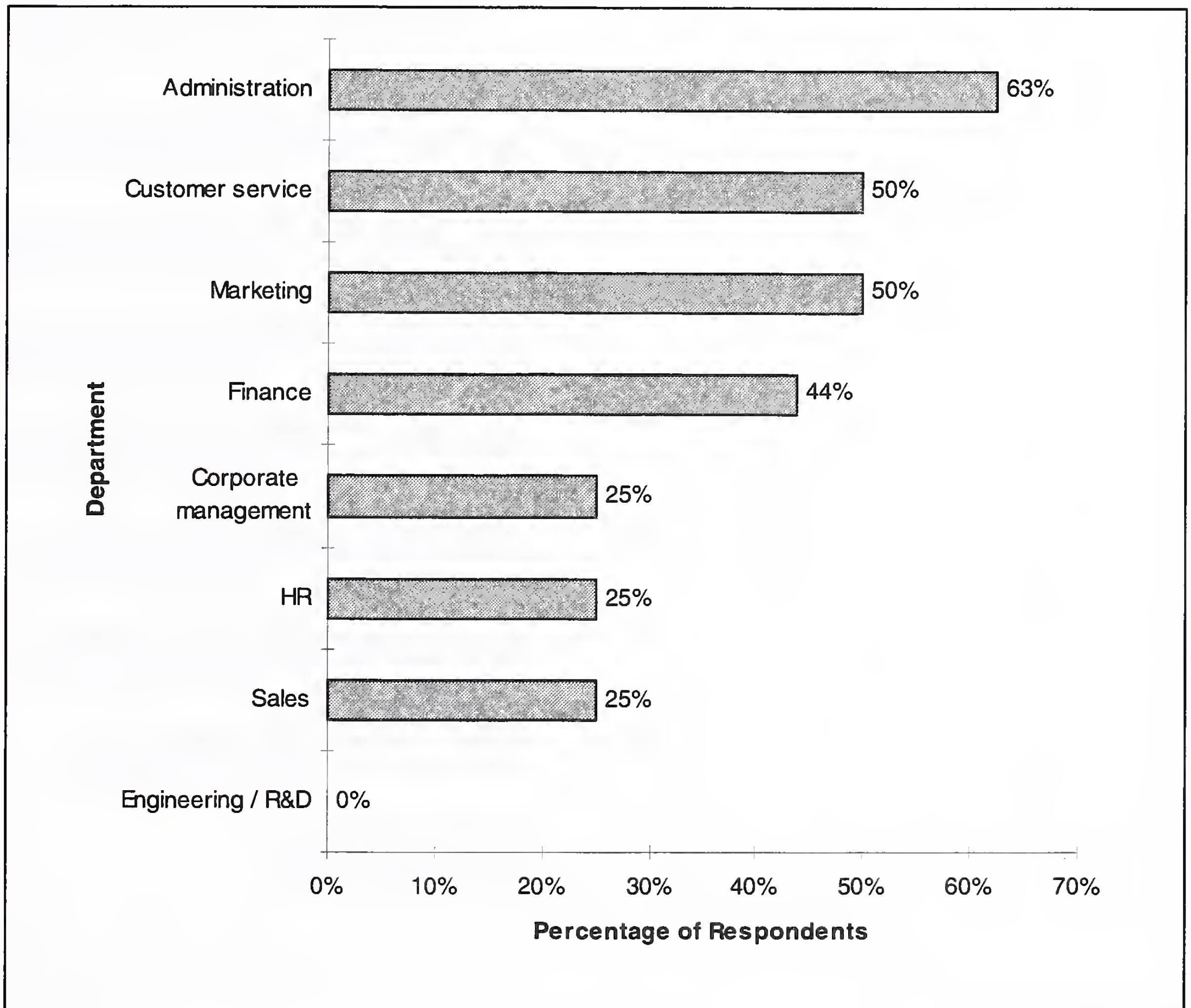


Sample: 33

Source: INPUT

Exhibit IX-10

Departments Benefited From Intranet (Insurance)

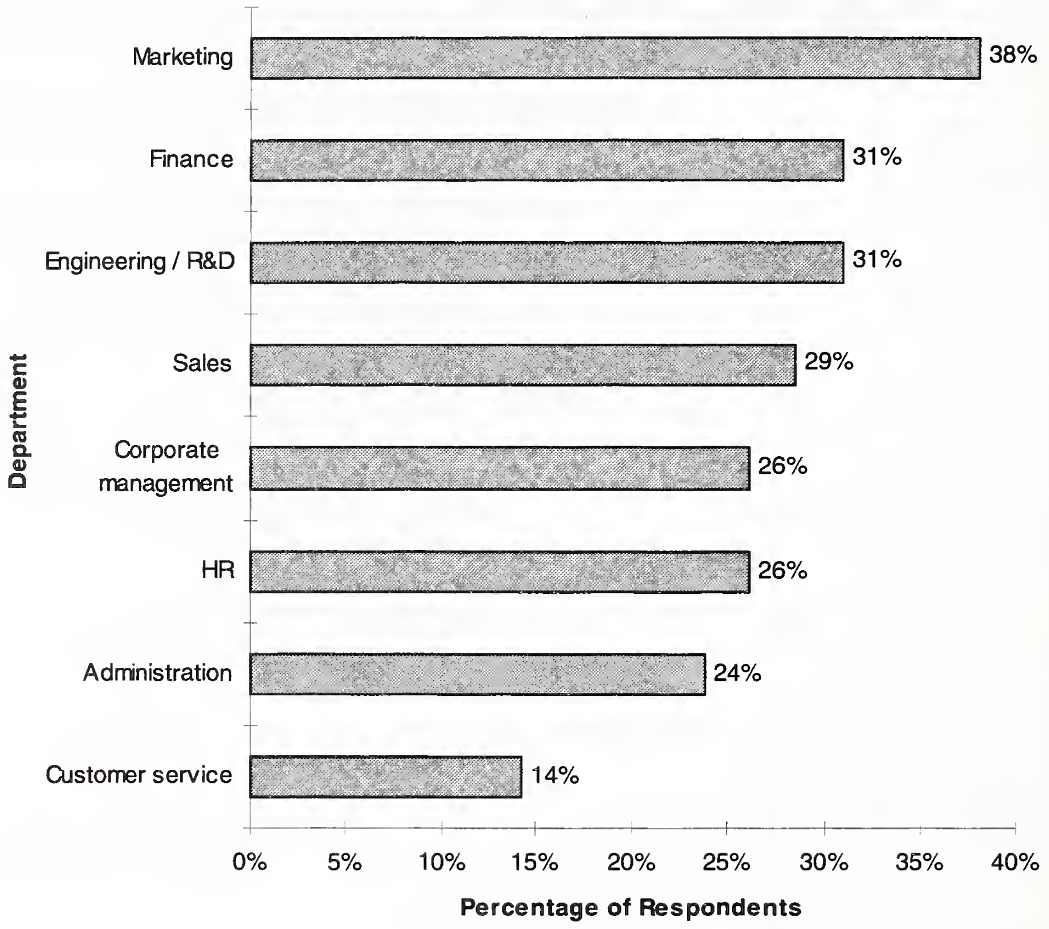


Sample: 16

Source: INPUT

Exhibit IX-11

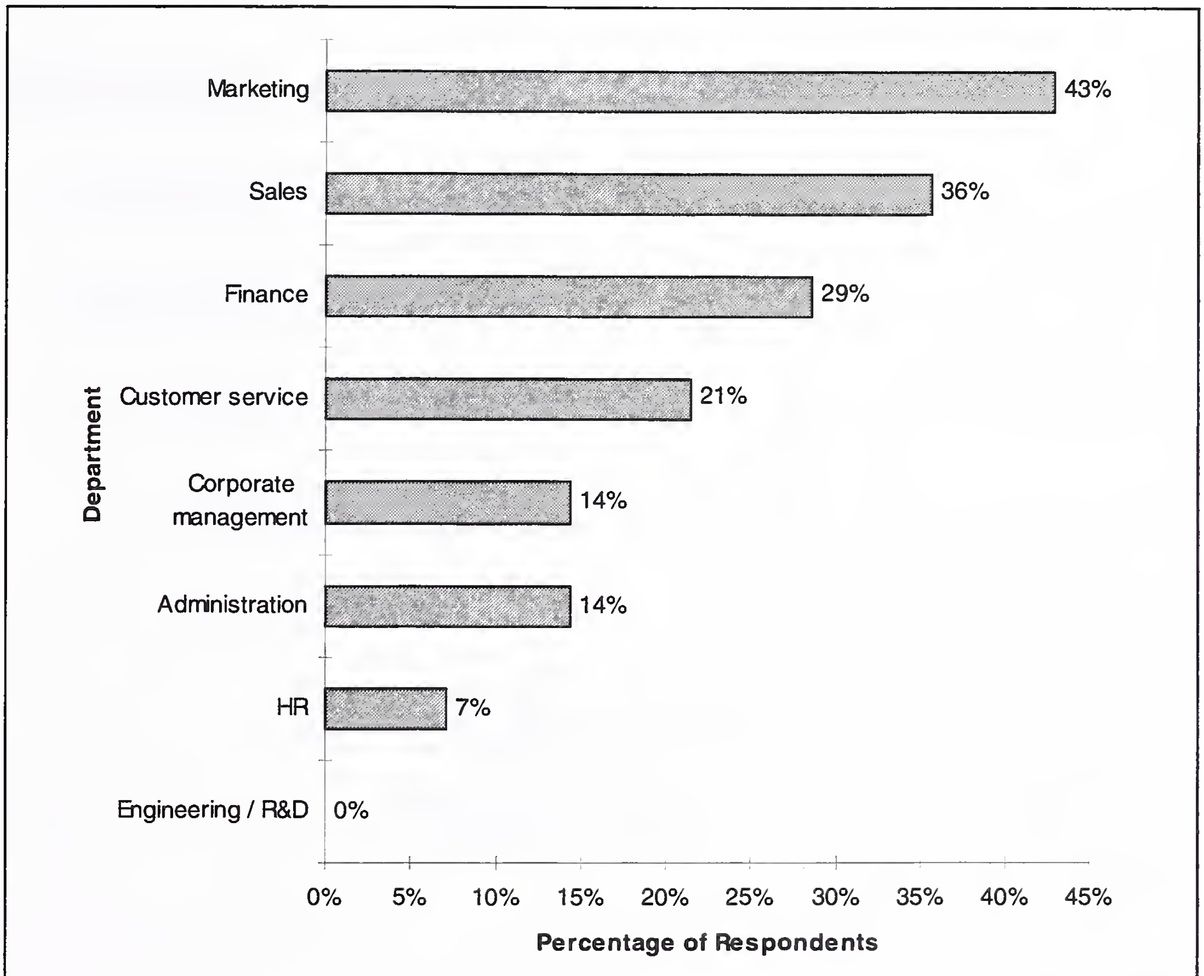
Departments Benefited From Intranet (Process Manufacturing)



Sample: 42 *Source: INPUT*

Exhibit IX-12

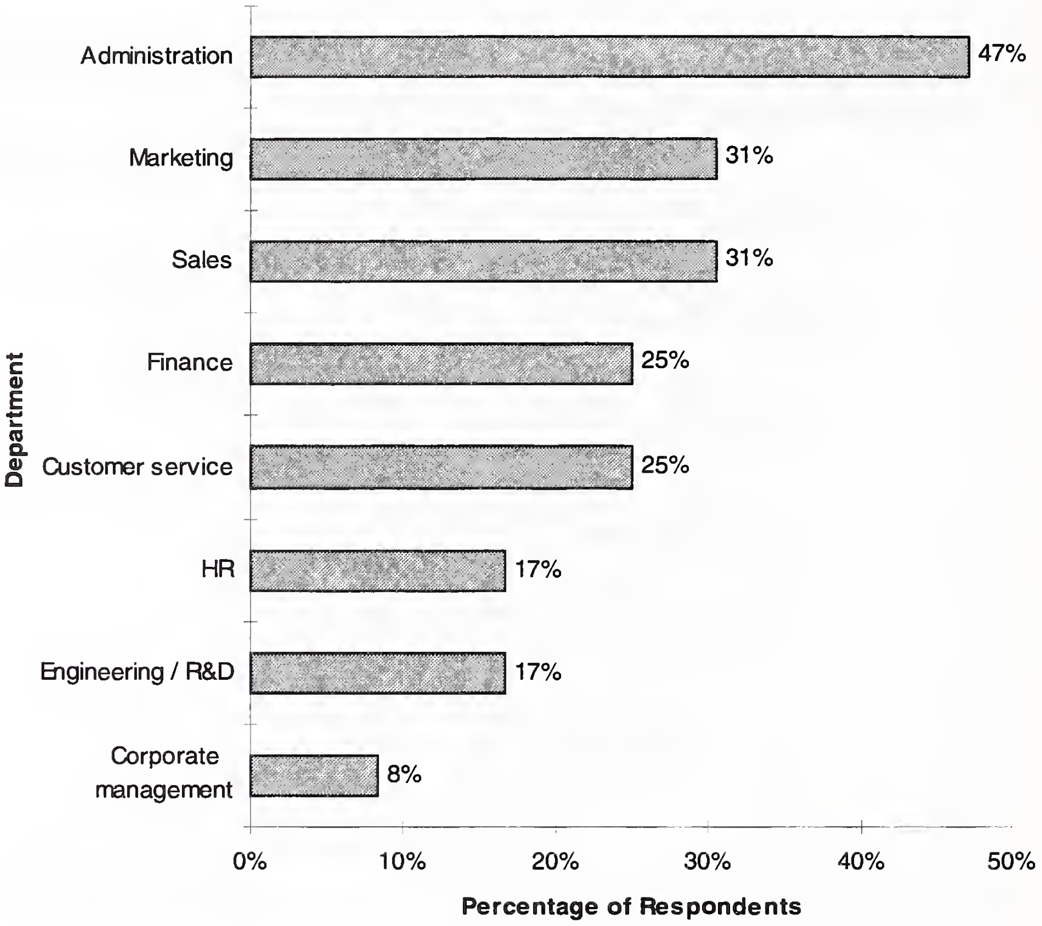
Departments Benefited From Intranet (Retail)



Sample: 14 *Source: INPUT*

Exhibit IX-13

Departments Benefited From Intranet (Services)



Sample: 36 *Source: INPUT*

C

Connectivity Supported

Exhibits IX-14, IX-15 and IX-16 show the levels of connectivity currently or to be supported by Owners, Builders and Evaluators respectively.

The majority of respondents allow or intend to allow access to the public Intranet from their Intranet. This indicates organizations are confident with the security technology available to secure a mixed public and private network environment. However, nearly 20% of companies currently considering an Intranet do not at this stage expect to connect their Intranet to the Internet. Although the reasons for this are not included in this report, INPUT expects that security concerns are significant among those reasons. When considered alongside users' stated need for security-related Intranet services, this indicates related opportunities exist, for example: security education and awareness-raising, firewall products and services and data security (encryption, authentication and non-repudiation).

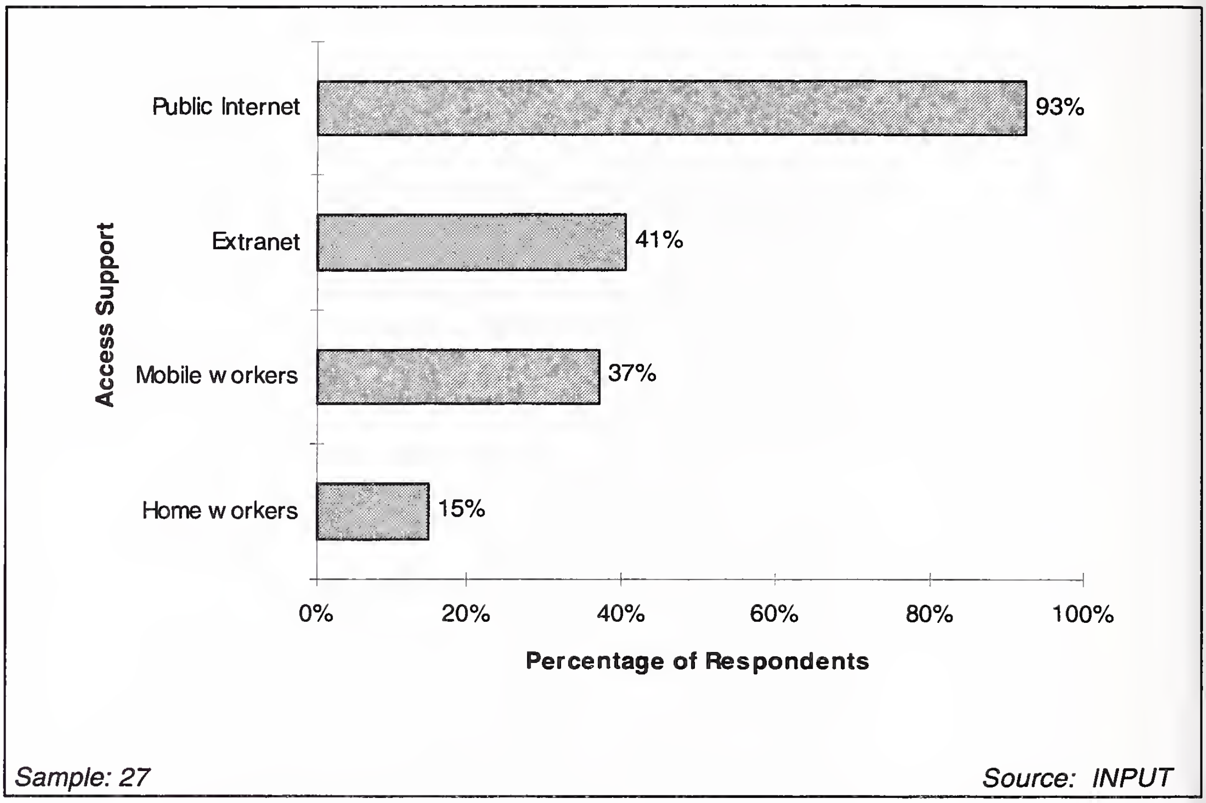
Organizations currently building an Intranet were significantly more optimistic of their ability to support mobile workers via their Intranet than were other respondents. There are still significant problems involved in providing mobile workers with access to applications and data held on an Intranet, primarily related to bandwidth. Intranets are developed to run within a corporate network, and the reduced bandwidth available to users outside the network, connecting via modem, both limits the amount of data that can be accessed and incurs management problems in data synchronisation. The bandwidth available to individual mobile workers is typically less than one percent of that available to users sharing an internal network (in this case, 28.8Kbps as opposed to 10Mbps).

Extranet connectivity (specifically, allowing access to and from the Intranets of specified customers and suppliers via the Internet) was supported by current Intranet users and expected to be supported by other respondents in equal measure. While the market for full-function Extranet applications is still embryonic, not all users require such applications. Simple access to another organisations' Intranet qualifies as an Extranet, even though what can be done thereafter may be limited. The relatively high proportion of respondents claiming Extranet connectivity does not, therefore, indicate extensive use of Extranet applications (commerce, for example), but indicates that the basic infrastructure is in place in those organisations, even if only for simple functions such as file transfer. Widespread use of the Internet to conduct commerce will not occur until industry standards are established and tested in live applications. INPUT expects Internet commerce to increase rapidly from 1998, as such standards as SET achieve market acceptance.

Home workers (or "telecommuters") are neither currently nor expected to be supported at all well. However, INPUT expects support for home workers to increase significantly in the future as more employees purchase home PCs, modem speeds increase (notably to 56Kbps), and ISDN drops in price. The business and social benefits of telecommuting will be observed in other countries before its use in the UK increases sharply. For example, telecommuting is rapidly increasing in popularity in the US, driven by such disparate factors as environmental car use legislation, maternity issues and even natural disasters such as the San Francisco earthquake of 1989. US Internet and Intranet vendors will support their home market as telecommuting increases. As US vendors dominate the Internet and Intranet market, the availability of telecommuting products will be sufficient to stimulate demand in the UK and other countries.

Exhibit IX-14

Connectivity Supported (Intranet Owners)

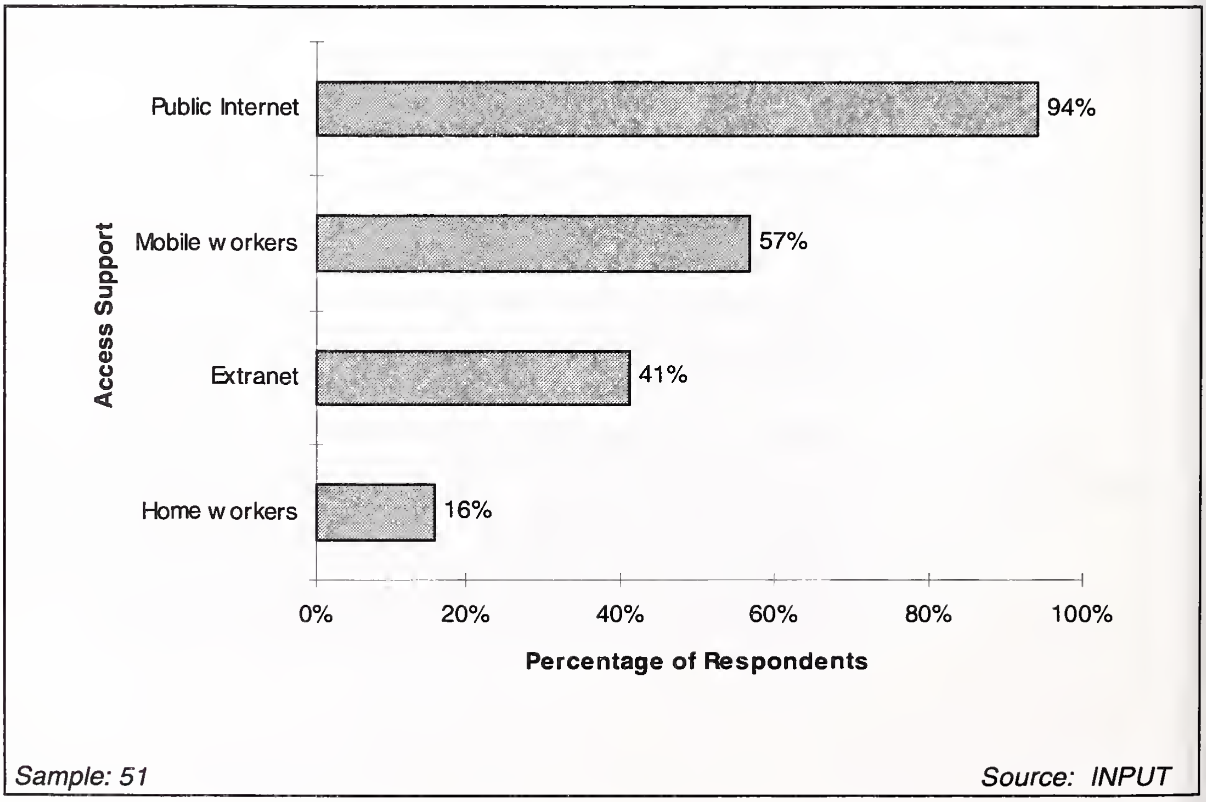


Sample: 27

Source: INPUT

Exhibit IX-15

Connectivity to be Supported (Intranet Builders)

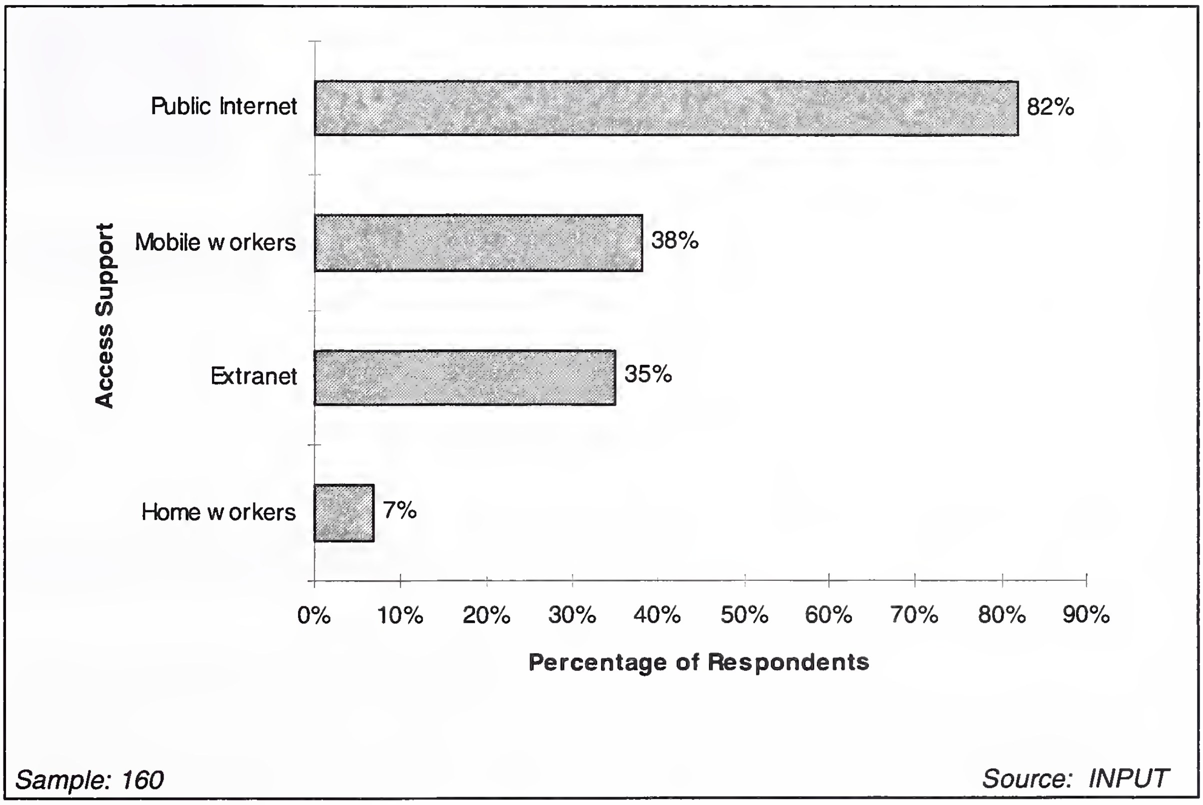


Sample: 51

Source: INPUT

Exhibit IX-16

Connectivity to be Supported (Intranet Evaluators)



Sample: 160

Source: INPUT

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X

Intranet Budgeting

A

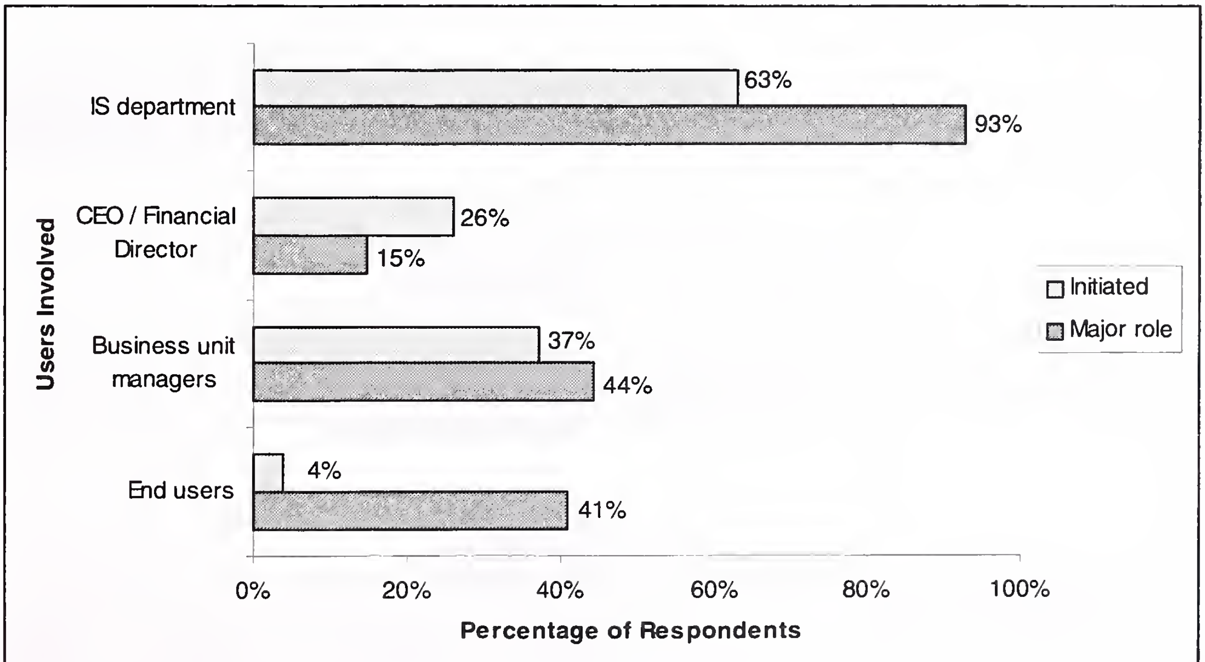
Roles Played in Intranet Development

1. By Current Intranet Status

Exhibits X-1, X-2 and X-3 show which areas within organisations initiated Intranet activities and which areas have played a major ongoing role in Intranet activities.

Exhibit X-1

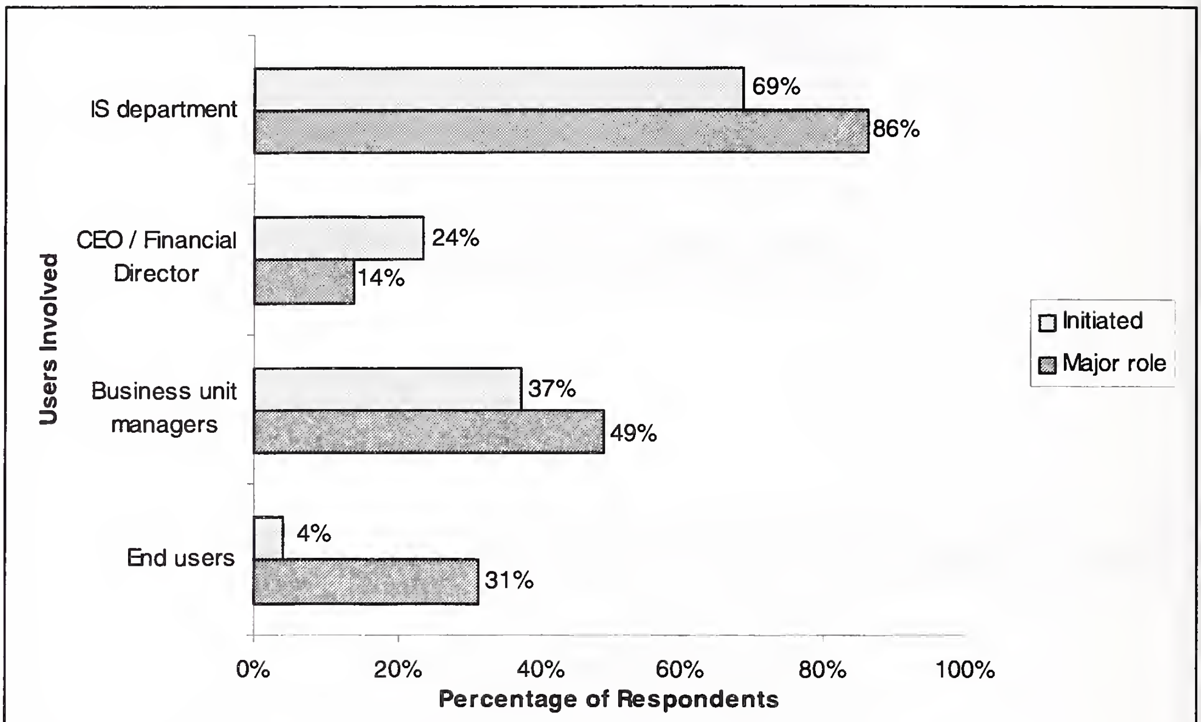
Roles Played in Intranet Activities (Intranet Owners)



Sample: 27 *Source: INPUT*

Exhibit X-2

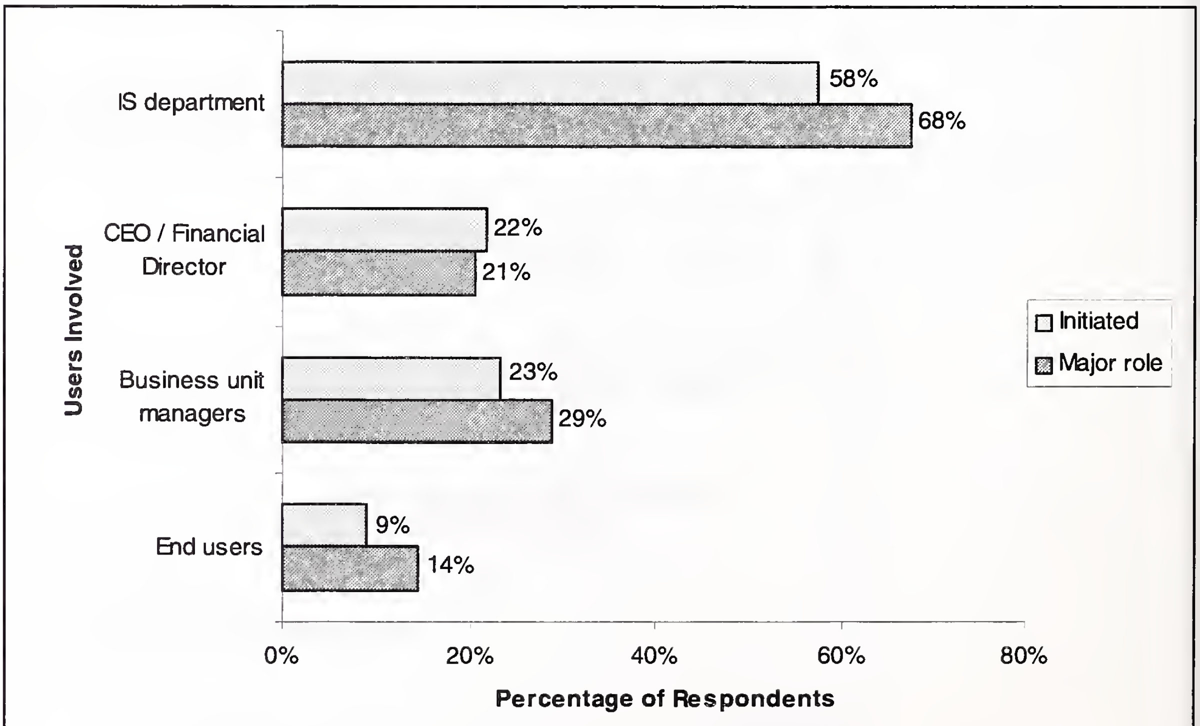
Roles Played in Intranet Activities (Intranet Builders)



Sample: 51 *Source: INPUT*

Exhibit X-3

Roles Played in Intranet Activities (Intranet Evaluators)



Sample: 160 *Source: INPUT*

In all cases, IS departments have played the biggest role both in terms of initiating Intranets and playing a major role in their development. As Intranets move more into the mainstream of IT, however, it appears that IS departments may be playing less of a central role in their development. Early adopters (Owners) were driven by IS; Builders are driven less so, and Evaluators less still.

Business unit managers are the second most significant force within organisations in initiating and driving Intranets. In all cases, nearly as many initiate Intranet development as play a major ongoing role. This appears to be in accordance with the role of CEOs and Financial Directors, who initiate more than they play an ongoing role, in approximately similar proportions.

End users have taken a more prominent role in ongoing Intranet activities among early adopters than they have among Builders or Evaluators.

The pattern this suggests is:

- Early adopters developed Intranets in conjunction between IS and end users, indicating a bottom-up, “home grown” Intranet approach.

- Organisations less advanced in Intranet development give comparatively less responsibility to IS and end users in Intranet development, indicating that Intranets are increasingly considered a business asset, and not so much a technological curiosity

IT vendors’ Intranet marketing should be targeted at the major initiators of Intranet projects (IS Director or CIO). Although named by fewer organisations as Intranet initiators, CEOs and CFOs should also be targeted when their relative influence within the organisation is considered. For application-specific products and services, business unit managers will be primary targets.

Within IS departments, a significant proportion of employees have been involved in Intranet development. Among Owners, around 20% of IS staff have been involved in their Intranet. Among Builders, the figure is around 25% of IS staff.

2. By Industry

Exhibits X-4 to X-10 show for specific industry sectors which areas with organisations initiated Intranet activities and which areas have played a major ongoing role in Intranet activities.

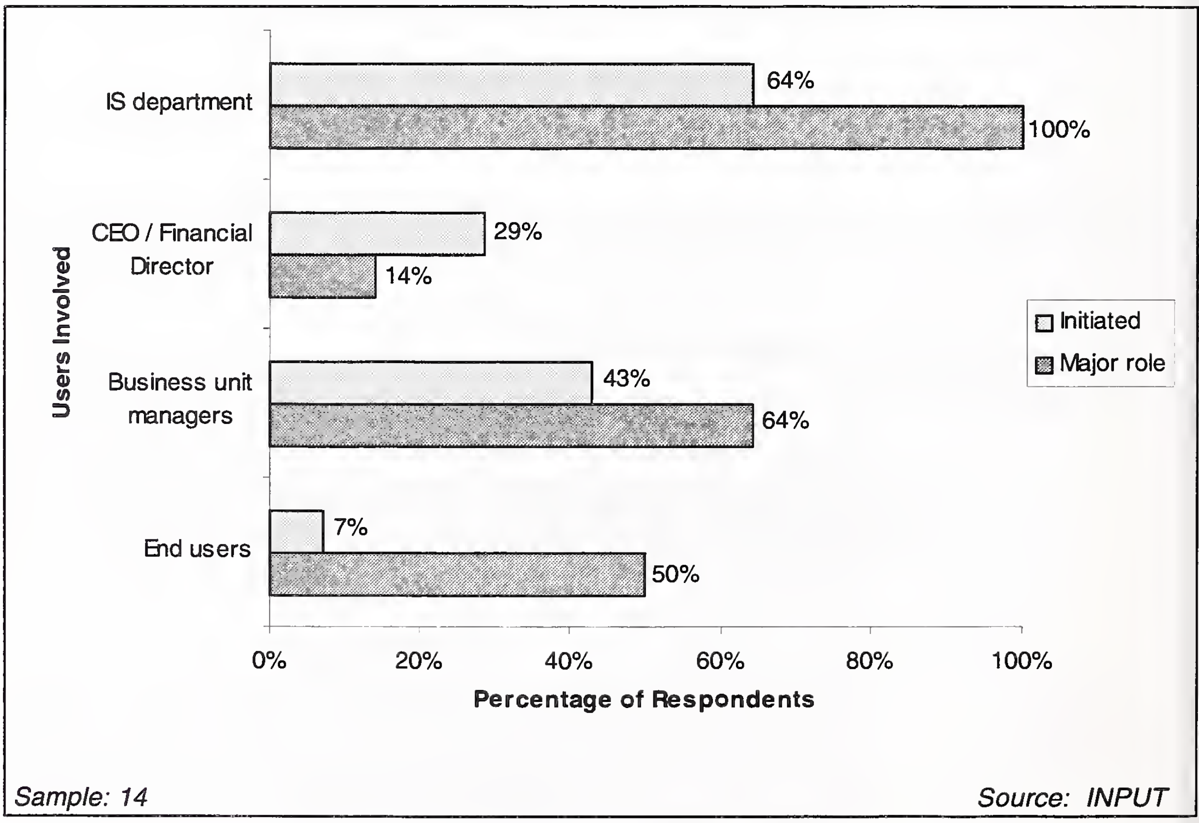
Within banking and finance, ongoing Intranet activities appear to be distributed throughout the organisation more than in other industries. End users, business unit managers and IS all play a significantly more active than average role in ongoing activities.

Within the services industry, end users tend to be more active in initiating Intranet activities. End users play a less active than average ongoing role within retail and government.

Less active than average roles are also played by IS within discrete manufacturing (for ongoing participation) and CEO-level within government (for project initiation).

Exhibit X-4

Roles Played in Intranet Evaluation and Development (Banking and Finance)

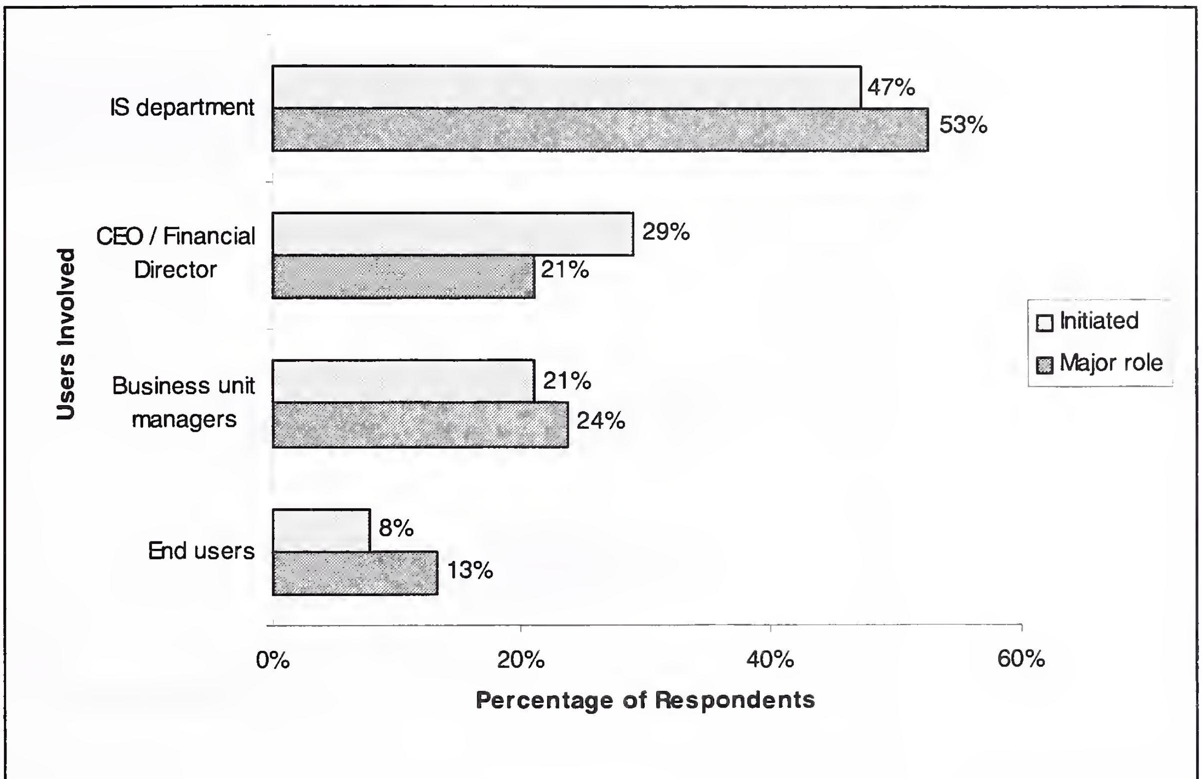


Sample: 14

Source: INPUT

Exhibit X-5

Roles Played in Intranet Evaluation and Development (Discrete Manufacturing)

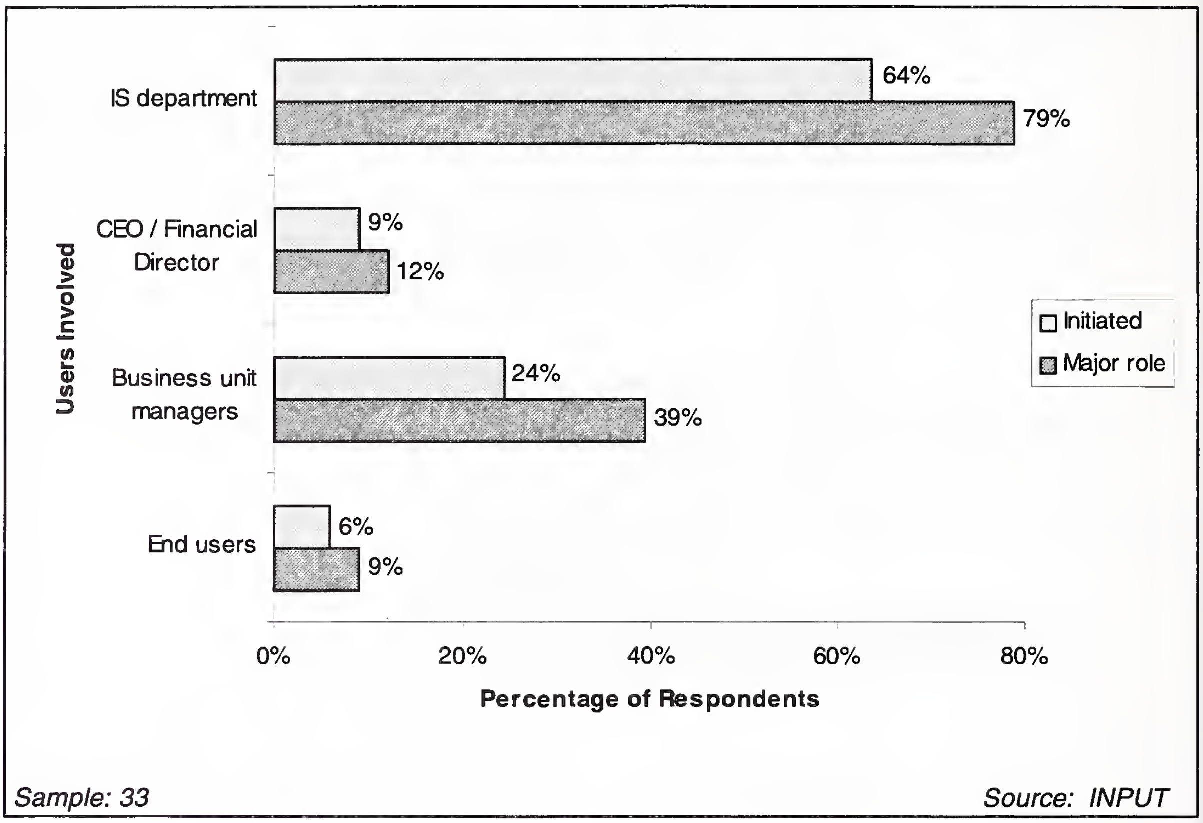


Sample: 38

Source: INPUT

Exhibit X-6

Roles Played in Intranet Evaluation and Development (Government)

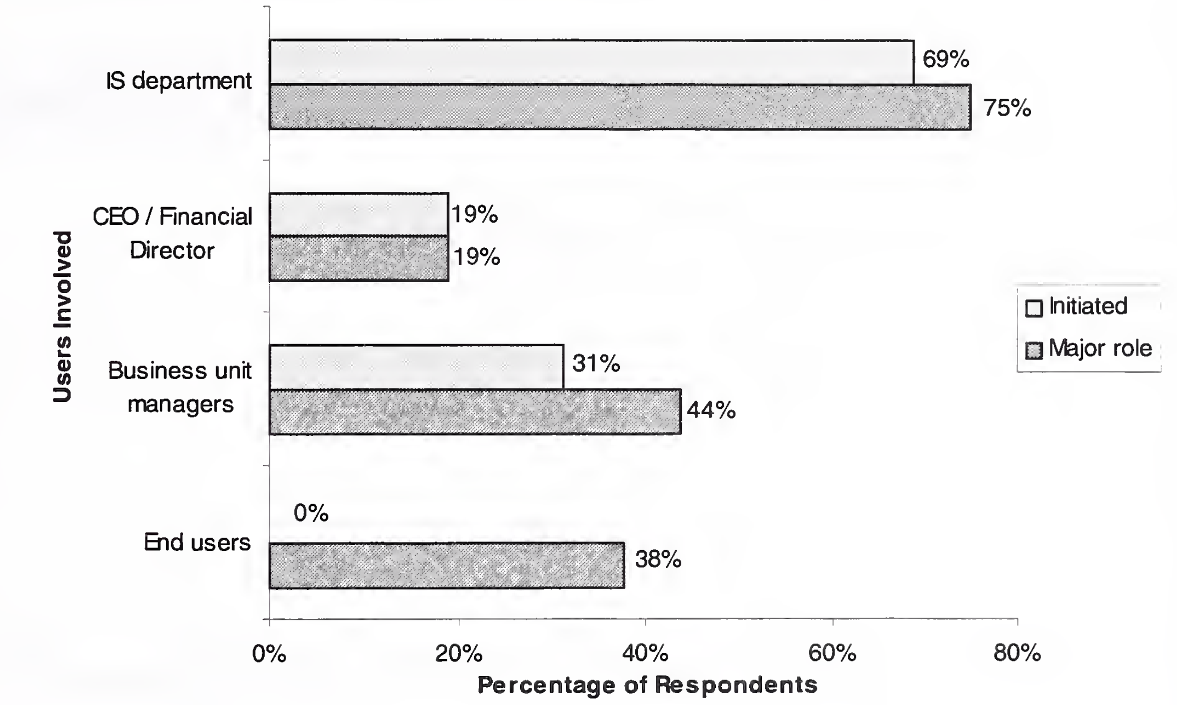


Sample: 33

Source: INPUT

Exhibit X-7

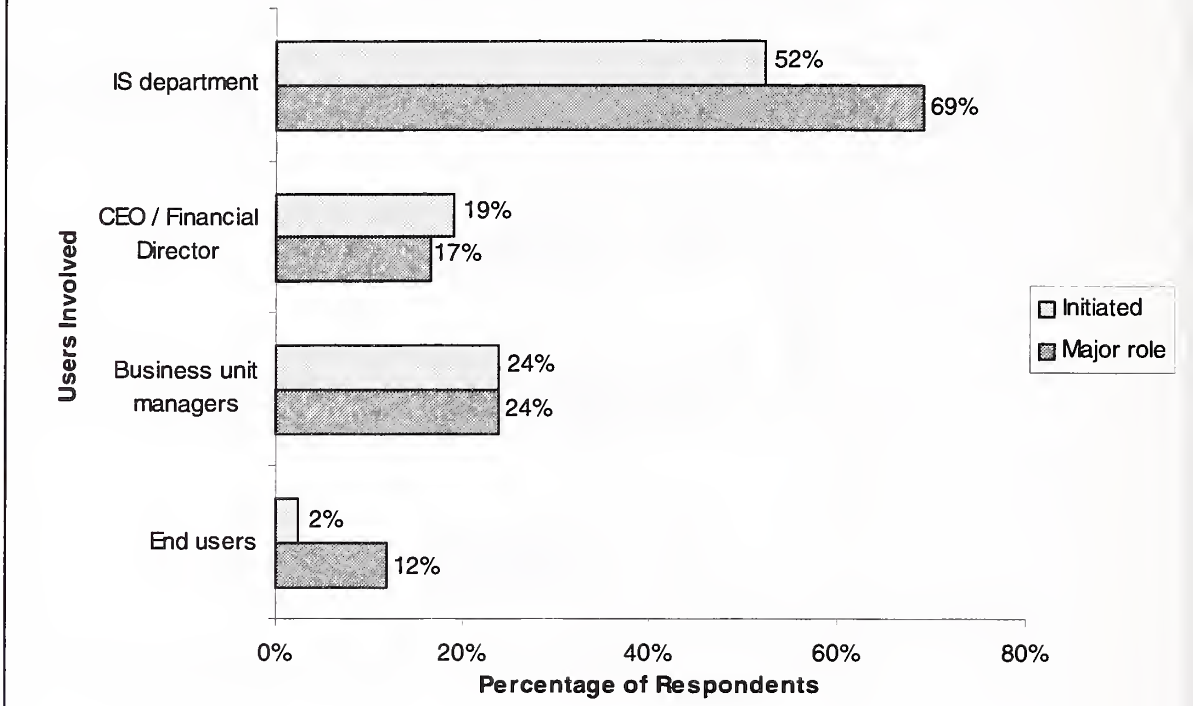
Roles Played in Intranet Evaluation and Development (Insurance)



Sample: 16 *Source: INPUT*

Exhibit X-8

Roles Played in Intranet Evaluation and Development (Process Manufacturing)

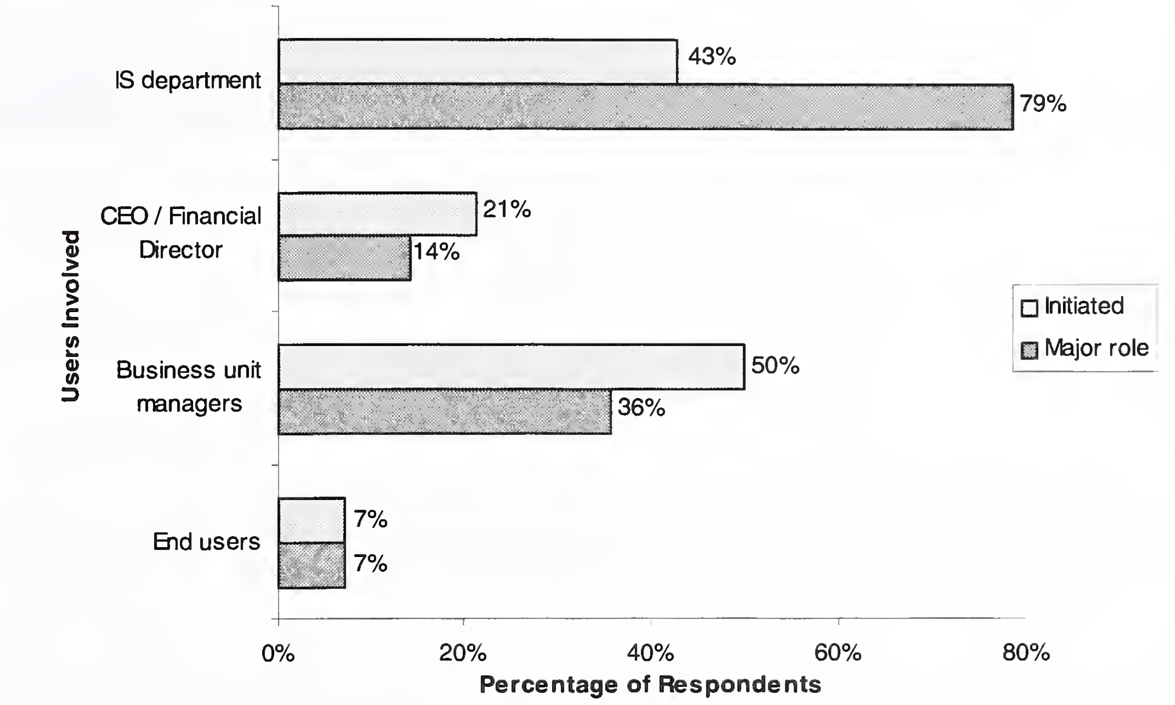


Sample: 42

Source: INPUT

Exhibit X-9

Roles Played in Intranet Evaluation and Development (Retail)



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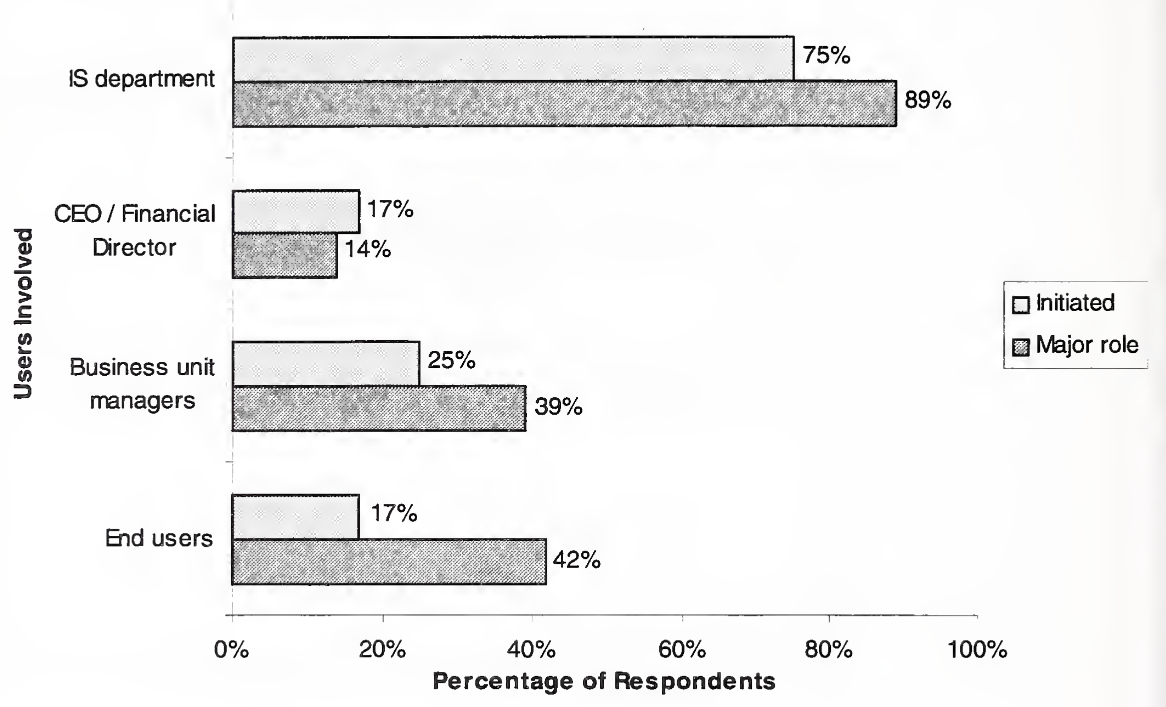
Source: INPUT

Exhibit X-10

Roles Played in Intranet Evaluation and Development (Services)



Sample: 36 *Source: INPUT*

B

Intranet Development Budget Allocation

1. Intranet Owners

Among Intranet Owners, most respondents were allocated a budget by the parent organisation or by central IS. The criteria for allocating specific Intranet budgets were not stated by respondents.

Out of 19 Owners who described their budgets, 14 (74%) stated that their Intranet budget was provided by their HQ or parent organisation, or that the organisation has one central IT budget out of which Intranet development was funded.

Two respondents stated that divisions have little or no involvement in Intranet decisions; they are made centrally and executed locally.

One respondent stated that Intranet budget allocation is still undecided; it has so far been taken out of the overall IT development budget.

One respondent stated that development and support is funded from the IT budget and that information provision is funded per department

One respondent stated that the Business Services department specified requirements, IS department designed and costed the project, and HQ provided the budget.

One respondent stated that the Financial Director negotiates a budget for IT at Board level, and the Board apportions budget provision across the departments.

One respondent stated that the HQ funded its own Intranet but that other locations will finance and develop their own Intranets.

2. Intranet Builders

Out of 31 Builders who described their budgets, 16 (52%) stated that their Intranet budget was provided by their HQ or parent organisation, or that the organisation has one central IT budget out of which Intranet development was funded.

Three respondents stated that their Intranet budgets comprise contributions from individual business units (“top slicing” as one respondent described it).

A further two respondents stated that their budgets are shared between individual business units and IS. One of these organisations also receives Intranet budget from a separate division, Central Development Services.

Three respondents stated that their budget provision is shared between corporate HQ and regional offices

Two respondents stated that their budget was set by the Financial Director, but gave no further details.

One respondent stated that development is currently being funded by IS, but will be funded by business units in the future.

Conversely, one respondent stated that development is currently funded by IS and one business unit (“Electronic Publishing”), but will be funded completely by IS in the future.

One respondent stated that Intranet development is currently funded from a segment of the overall IT budget originally dedicated to redeveloping old systems.

Two respondents did not know where their Intranet budget would come from, but one stated that it could not be provided by IS alone.

3. Intranet Evaluators

Among the 160 Evaluators interviewed, 86 described how they would expect their Intranet budgets to be set, were they to go ahead with an Intranet project. Of those 86 Evaluators, 40 (47%) stated that their Intranet budget would be provided by their HQ or parent organisation, or that the organisation has one central IT budget out of which Intranet development would be funded.

A further 23 respondents (27%) stated that Intranet funding would be provided by individual departments, according to the use and benefits each departments got from an Intranet.

A further 13 respondents (15%) stated that Intranet funding would be at least partially regional, with separate divisions, branch offices, subsidiaries and franchise holders contributing towards the budget.

C

Sources of Intranet Development Budgets

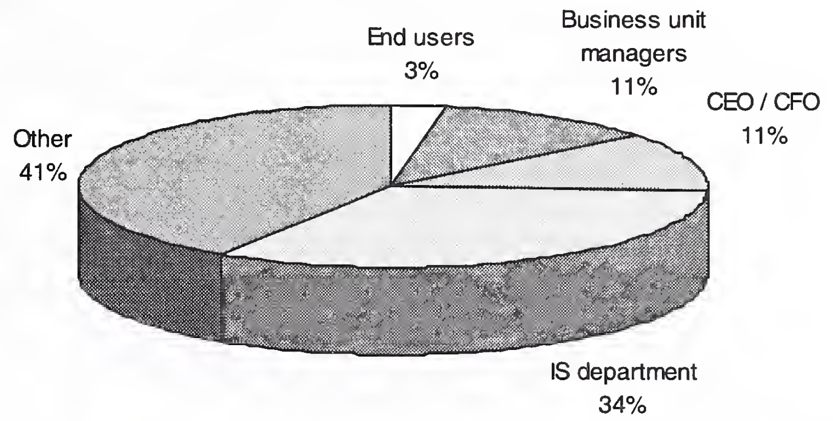
Exhibits X-11 and X-12 show the breakdown of Intranet budget sources within Owner and Builder organisations respectively. Overall, IS contributes the greatest proportion of the budget required, indicating Intranets are still seen as a technology issue.

The “Other” budget source named by respondents was “corporate” or “parent company” in all cases but one (who named “Electronic Publishing” as providing 30% of the Intranet budget).

Services and particularly product marketing should therefore aim for the IS or corporate finance budget.

Exhibit X-11

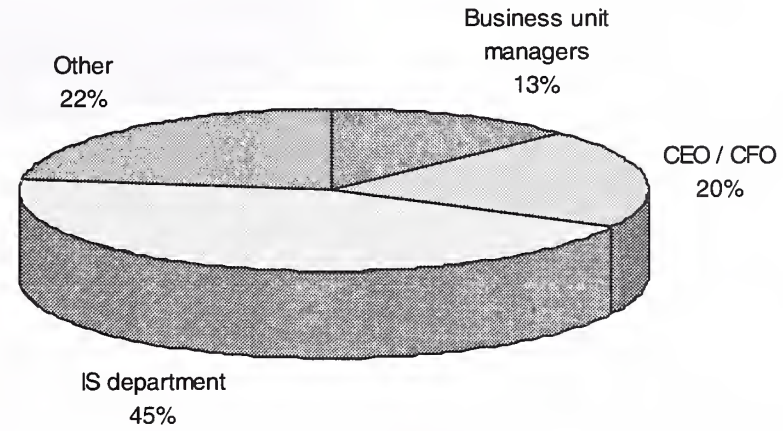
Intranet Budget Sources (Intranet Owners)



Sample: 21 *Source: INPUT*

Exhibit X-12

Intranet Budget Sources (Intranet Builders)



Sample: 37 *Source: INPUT*

D

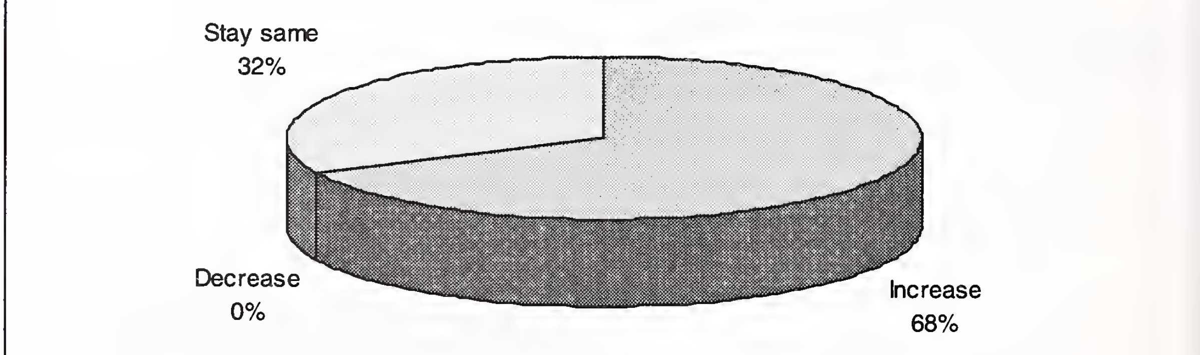
Expected Change in Intranet Budgets

Exhibits X-13 and X-14 show how Owners and Builders expect their Intranet budgets to change over the next two years. Most budgets will increase over the period, although a significant proportion of budgets is expected to remain at the same level.

Five Builders believed their Intranet budgets would decrease. Only two commented on the expected decrease: one gave lack of funding as the reason, while the other estimated the decrease in budget to be 10 to 15%.

Exhibit X-13

Expected Change in Intranet Budget, 1997-1999 (Intranet Owners)

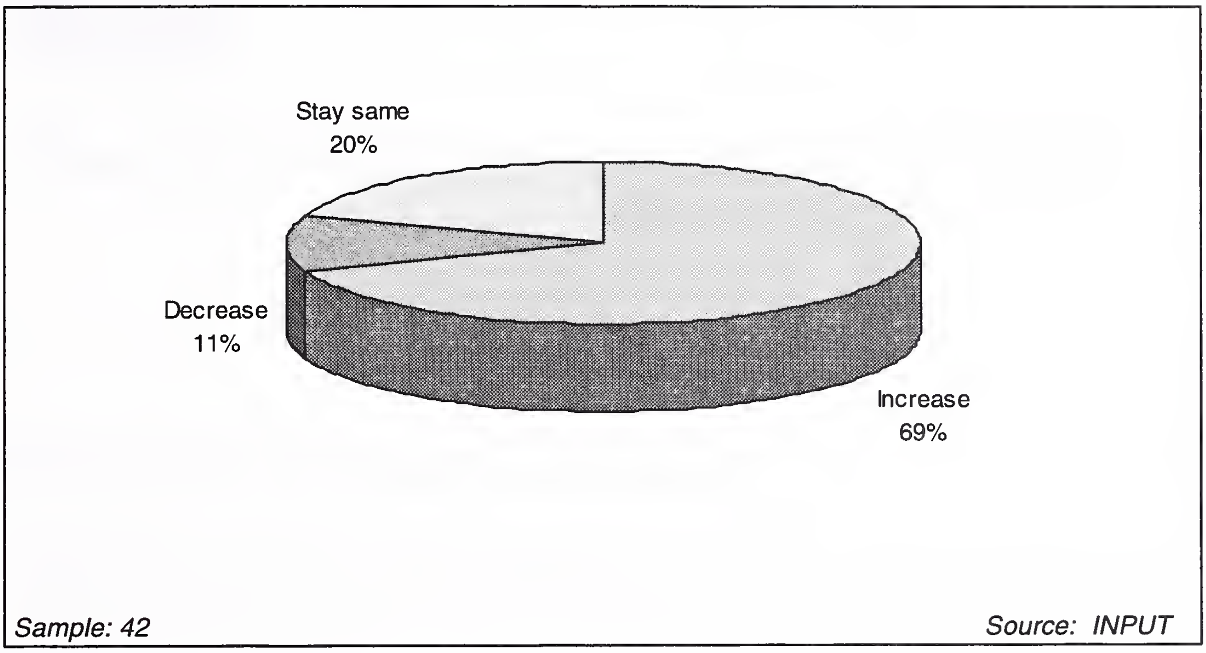


Sample: 22

Source: INPUT

Exhibit X-14

Expected Change in Intranet Budget, 1997-1999 (Intranet Builders)



Sample: 42 *Source: INPUT*

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XI

Results of Intranet Development

A

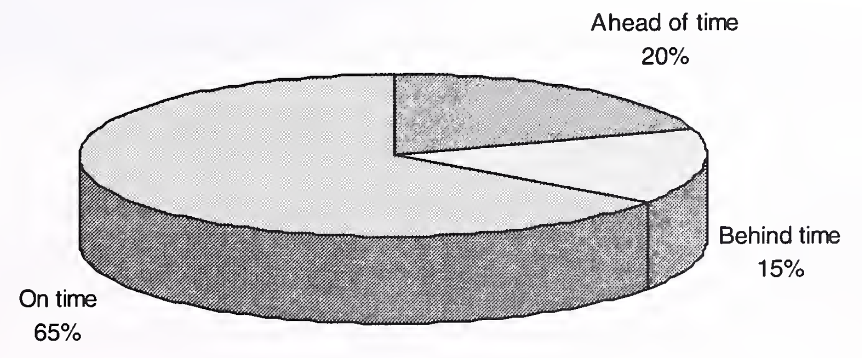
Measurement of Intranet Development by Timescales

Exhibits XI-1 and XI-2 show the proportion of Intranet development projects undertaken by Intranet Owners and Builders respectively that were or are expected to be completed on time, ahead of time and behind time.

Around two thirds of Owners claimed their Intranet projects were completed within time deadlines, and approximately equal numbers claimed to have completed development ahead and behind time. Builders claimed almost identical expectations. Overall, Intranet projects appear not to suffer from severe slippage, although it is inevitable that early Intranet implementations are relatively less complex and less integrated into the existing IT environment than those of the future, due to the newness of the Intranet market.

Exhibit XI-1

Timeliness of Intranet Development (Intranet Owners)



Sample: 20

Source: INPUT

The primary reasons given by Owners for their Intranet development being completed ahead of time were:

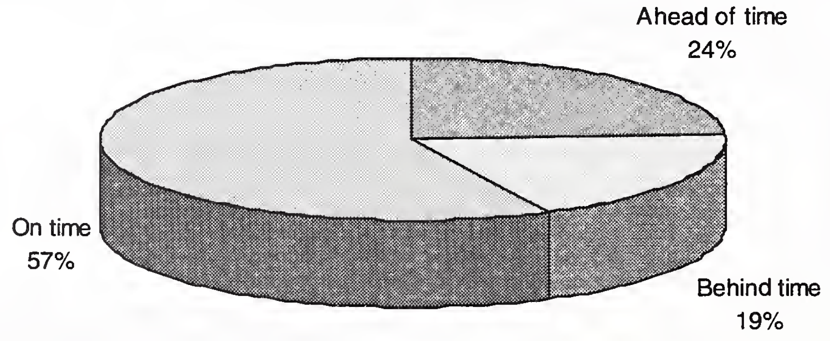
- Limited scope of initial Intranet development
- Increasing investments made in required resources
- Clarity of objectives and responsibilities
- Use of external service providers

The primary reasons given by Owners for their Intranet development being completed behind time were:

- Expansion of specifications and requirements during the project
- Specification took longer than planned to define
- Not enough time planned initially for consultancy
- “Most projects are behind time”

Exhibit XI-2

Expected Timeliness of Intranet Development (Intranet Builders)



Sample: 42

Source: INPUT

The primary reasons given by Builders for their Intranet development being completed ahead of time were:

- Limited scope of initial Intranet development
- Increasing investments made in required resources
- Use of external service providers
- Careful prioritisation and planning for contingency
- Clarity of objectives and responsibilities
- Lessons learned from parent company's Intranet development

The primary reasons given by Builders for their Intranet development being completed behind time were:

- Lack of priority on Intranet development
- Lack of development resources
- Unfamiliarity of, and inexperience with Intranet technology
- Decision making process was slower than planned
- Targets set were unrealistic and included no contingency
- "All major projects end up late"

B

Measurement of Intranet Development by Budget

Exhibits XI-3 and XI-4 show the proportion of Intranet development projects undertaken by Intranet Owners and Builders respectively that were or are expected to be completed on-budget, under budget and over budget.

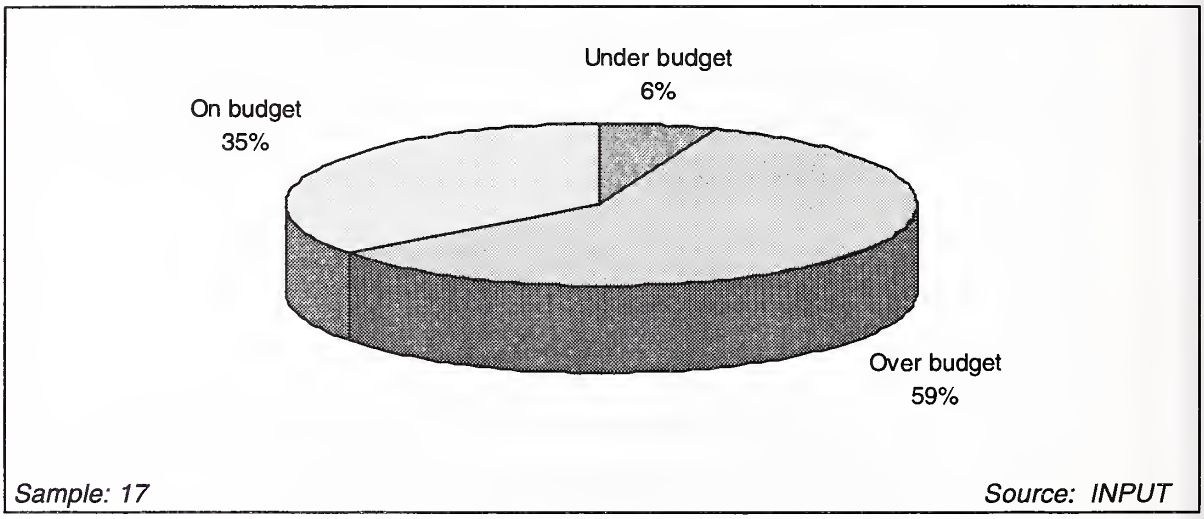
Owners and Builders differ in their claims. Over half of Owners interviewed admitted running over budget, while a third completed their projects on budget. Builders believe otherwise: two thirds claim they will complete their projects on budget, and a quarter expect to run over budget.

The difference between Owners' and Builders' statements suggests that those developing Intranets may tend to be overly optimistic about their chances of staying within budget. Considering the reasons given by Owners for exceeding their budgets, INPUT recommends emphasising the following in Intranet development service offerings:

- Pre-development consultancy, particularly requirements planning and resource allocation
- Pre-defined project contingency plans
- Product and service price sensitivity

Exhibit XI-3

Intranet Budget Outcome (Intranet Owners)



Sample: 17 *Source: INPUT*

Only one Owner claimed to have completed Intranet development under budget. The reason given for undercutting the budget, however, was:

- "To achieve our objectives would easily exceed the budget"

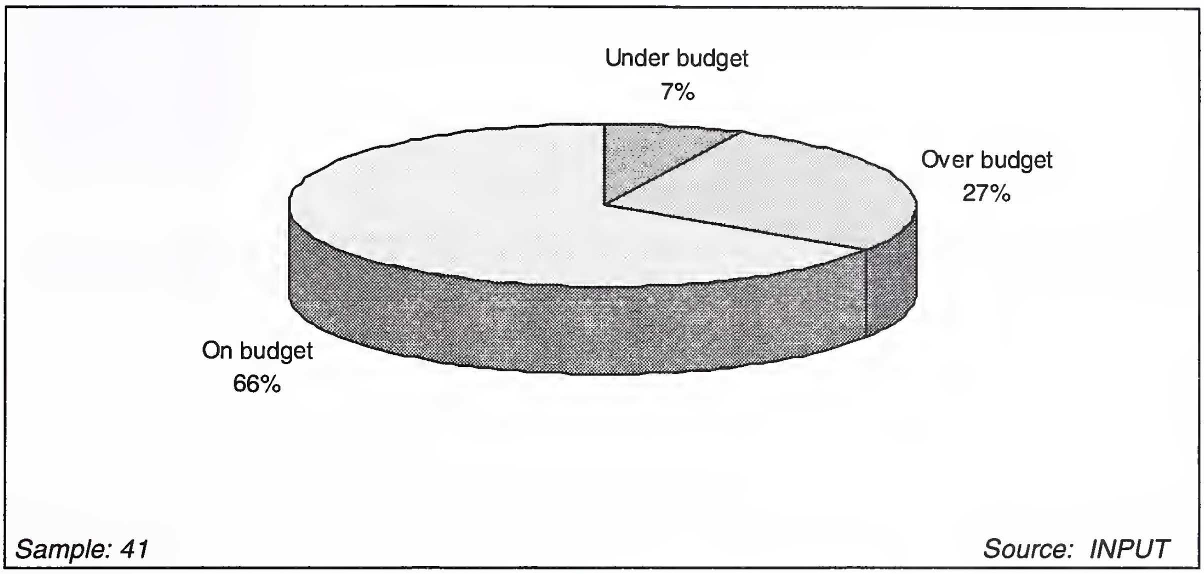
It is arguable whether this respondent completed Intranet development under budget, as the original requirements were altered during the project in order to fit within the budget.

The primary reasons given by Owners for their Intranet development being completed over budget were:

- Cost reduction pressure
- Incomplete or mis-estimated planning
- Project was behind time and needed to catch up
- Expansion of specifications and requirements during the project

Exhibit XI-4

Expected Intranet Budget Outcome (Intranet Builders)



Sample: 41 *Source: INPUT*

The primary reasons given by Builders for their Intranet development being completed under budget were:

- Re-use of existing resources
- Limited scope of initial Intranet development

The primary reasons given by Builders for their Intranet development being completed over budget were:

- Incomplete or mis-estimated planning
- Lack of funds
- Difficulty of putting a fixed cost on a resource-based services

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XII

Obstacles to Intranet Development

A

Obstacles by Current Intranet Status

Exhibits XII-1, XII-2 and XII-3 show the obstacles faced or perceived by Intranet Owners, Builders and Evaluators respectively in their Intranet development projects and considerations.

The high proportion of “Other” obstacles named by respondents of all types and the diversity of those obstacles show that there are many problems to be overcome before Intranets can be implemented smoothly.

Overall, prioritisation issues are the most commonly encountered obstacles. Due to the additive nature of Intranet development, whereby Intranets are overlaid on top of existing networks and applications rather than replacing them, at least in the short term, IT resources become stretched. Intranets must be developed alongside legacy and client/server infrastructure and applications, with few, if any, extra resources.

Security issues, lack of skills in-house, funding problems and Intranet-to-legacy integration are all named as obstacles by similar proportions of Owners and Builders, although the frequency of these problems does not exceed 20%.

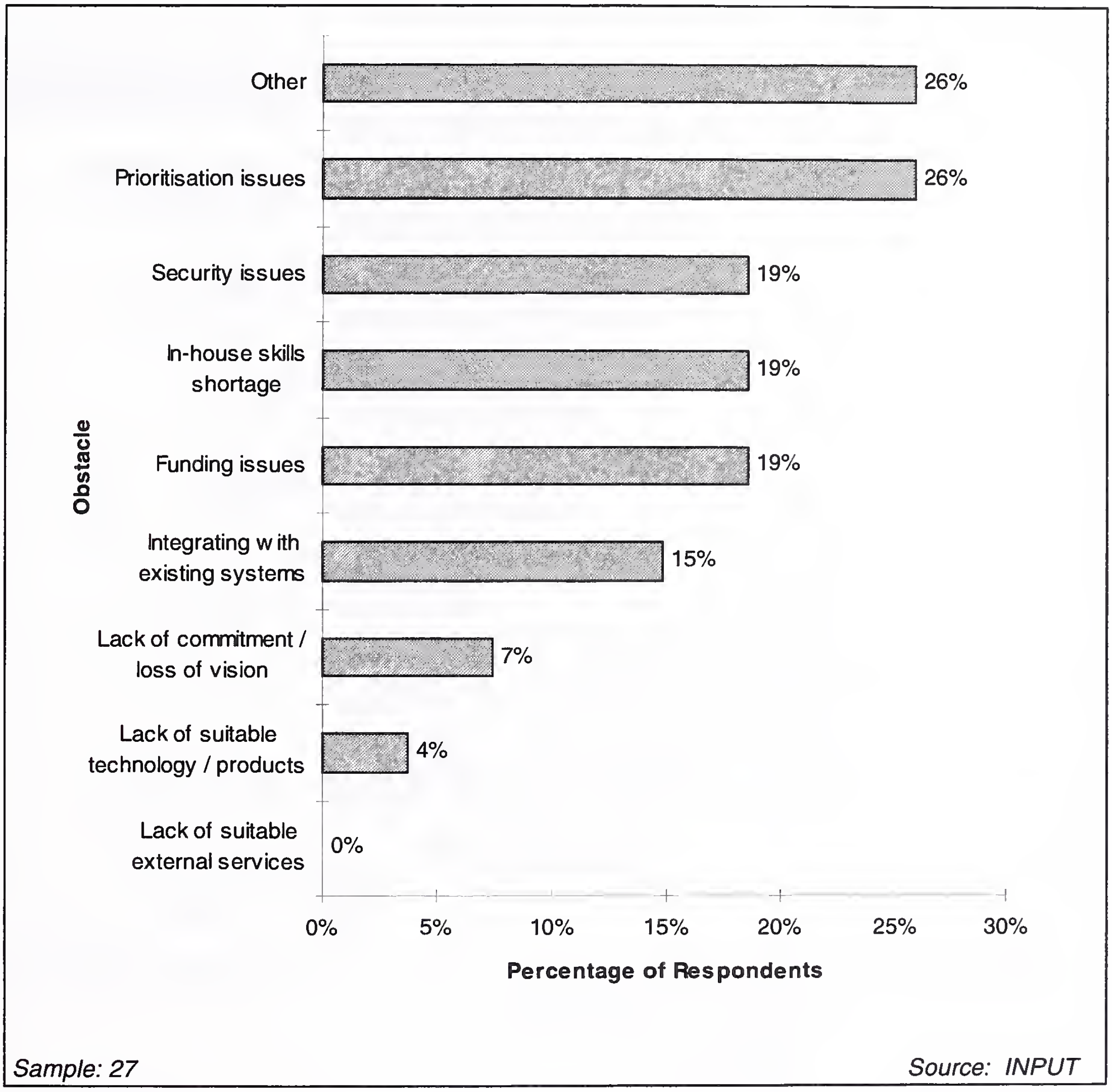
Despite the market for Intranet products being immature, there is little perceived problem over the availability of related technology and products. Many Intranet technology vendors developed their products for the Internet first, then adapted them for internal company use, for example Microsoft and Netscape for Web servers and AltaVista for search technology. Other vendors have adapted existing LAN-based products for Intranet use, for example Novell with IntraNetware (previously Netware). Much of the technology embedded within current Intranet products has existed for longer than the Intranet market itself.

Lack of external Intranet services is also not perceived as a problem. Unlike Intranet products, however, use of services is optional. Many Intranets have been developed internally, without recourse to external services, and so lack of available services would not be an obstacle for many organisations, regardless of whether such a lack existed or not. This finding does not show, therefore, that there is an abundance of Intranet service offerings. Instead, it shows that if there is not an abundance, that is not perceived as a major problem.

Few organisations who have developed or are developing Intranets rate lack of commitment as a major obstacle, although this is perceived as a much more significant problem by those yet to launch their Intranet projects. This may be due to fear of the unknown or to Intranet benefits being appreciated only when they can be demonstrated ("seeing is believing"). Whichever is the case, it appears that Intranet development, once underway, does not suffer greatly from internal apathy.

Exhibit XII-1

Obstacles to Intranet Development (Intranet Owners)

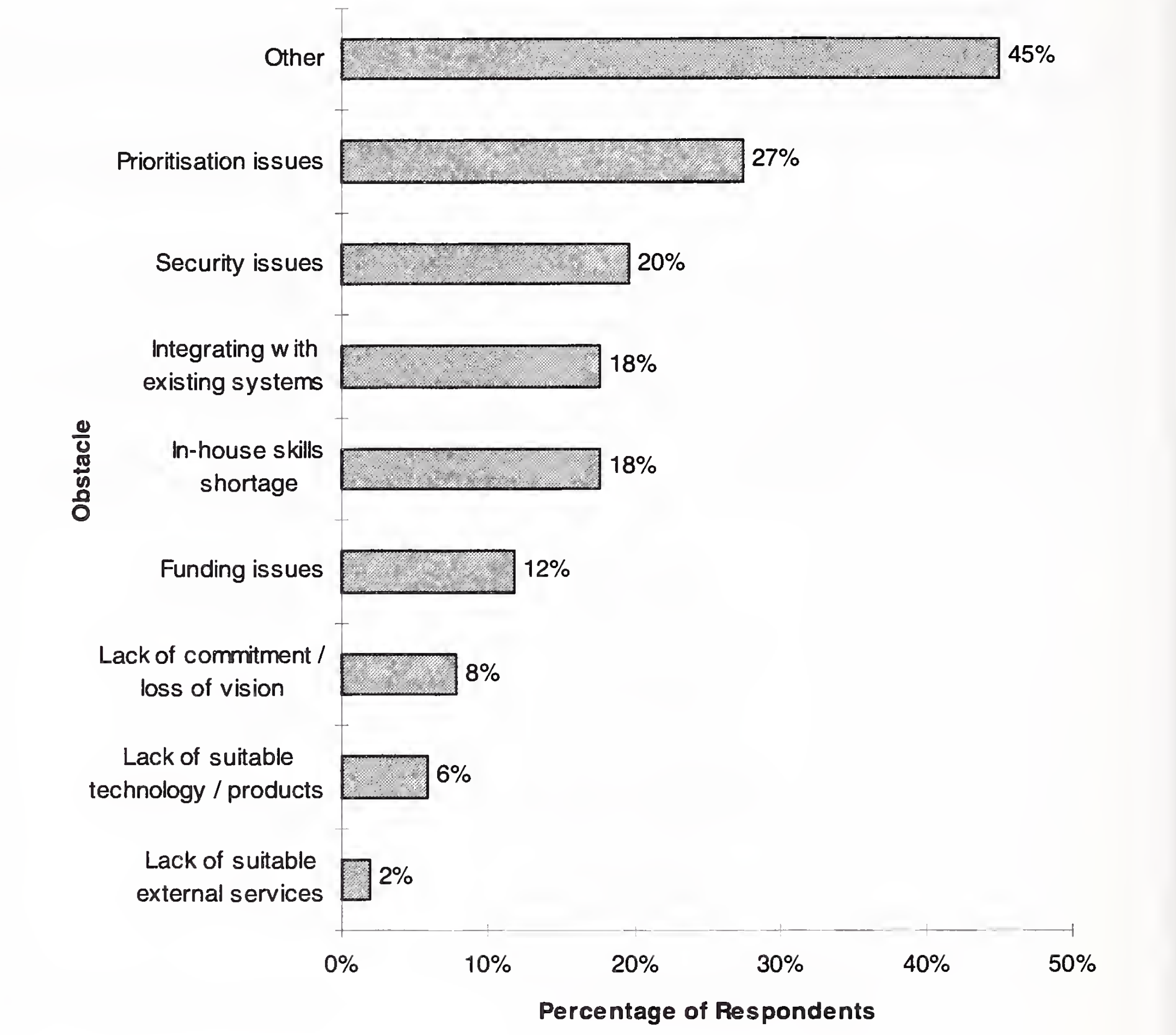


"Other" obstacles stated by Owners fell into the following categories:

- Technical issues (for example: network bandwidth)
- Lack of familiarity of and experience with Intranet
- Cultural issues (for example: raising Intranet awareness among staff)

Exhibit XII-2

Obstacles to Intranet Development (Intranet Builders)



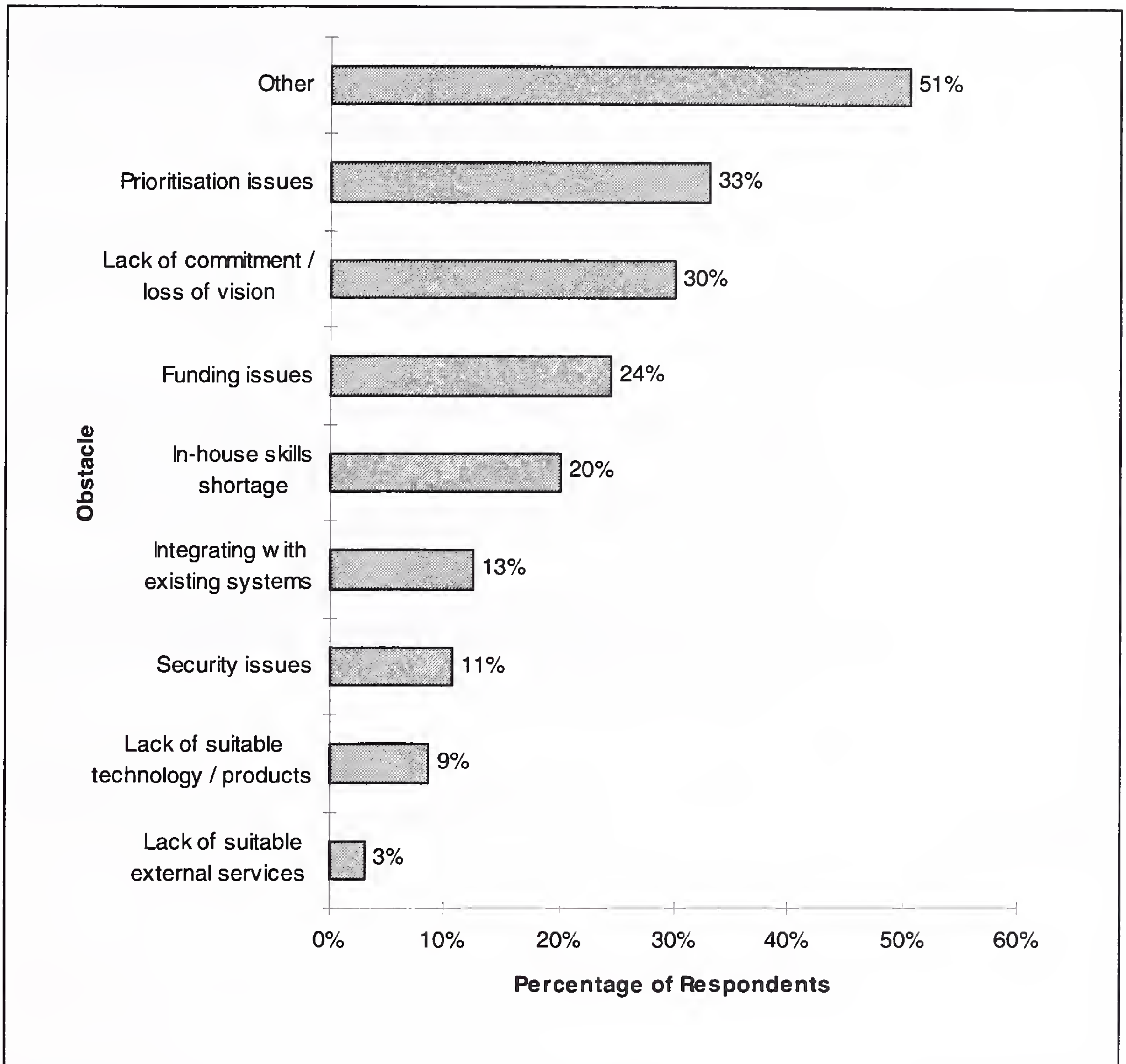
Sample: 51 *Source: INPUT*

"Other" obstacles stated by Builders fell into the following categories:

- Technical issues (for example: managing multiple data formats, implementing TCP/IP, compatibility and standards issues)
- Lack of familiarity of and experience with Intranet
- Cultural issues (for example: resistance from users, misuse or unauthorised use, justification of non-standard technology)
- Time pressures
- Complexity of project management

Exhibit XII-3

Perceived Obstacles to Intranet Development (Intranet Evaluators)



Sample: 160 *Source: INPUT*

"Other" obstacles stated by Evaluators fell into the following categories:

- Lack of familiarity of and experience with Intranet
- Technical issues (for example: upgrading current hardware and network infrastructure, bandwidth, compatibility and standards issues)
- Resource allocation
- Cultural issues (for example: overcoming inertia, apathy and cynicism, doubts about Intranet's business value)

- Uncertainty (for example: fear that Intranet market will be dominated by a small number of suppliers, difficulty in choosing a business partner, future-proofing)
- Time pressures
- Complexity of project management
- Increased support load

B

Obstacles by Industry

Exhibits XII-5 to XII-11 show the obstacles to Intranet development experienced or perceived by specific industry sectors. The figures presented for each industry are those of the categories pre-defined in the survey questionnaire and do not include “Other” responses.

Each industry has experienced, or perceives different obstacles. Exhibit XII-4 shows for specific industry sectors which obstacles were stated particularly frequently and infrequently.

Exhibit XII-4

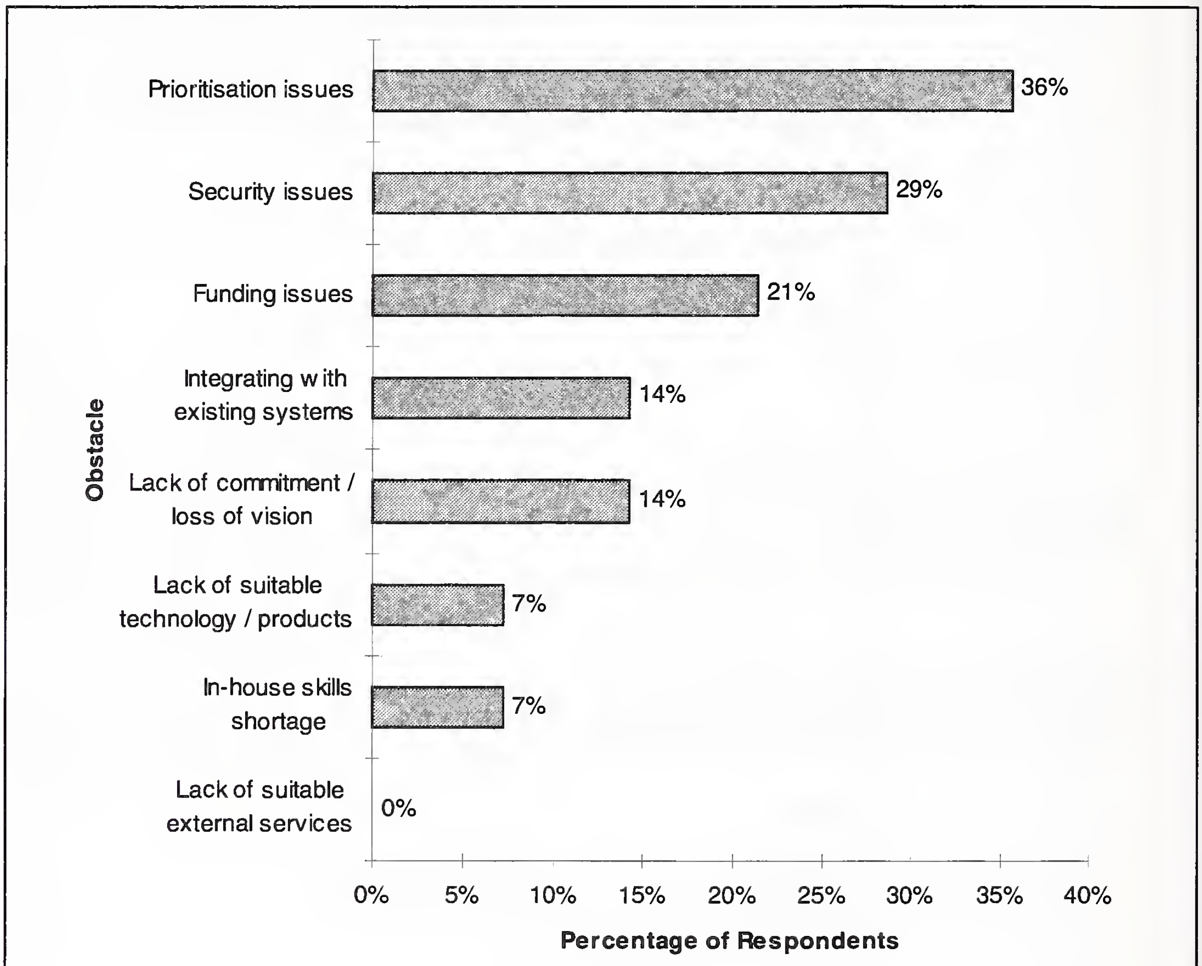
Greater and Lesser Obstacles to Intranet Development (by Industry)

Industry Sector	Greater Obstacles	Lesser Obstacles
Banking and finance	Security issues	In-house skills shortage
Discrete manufacturing	—	Security issues
Government	Funding issues	In-house skills shortage Integrating with existing systems
Insurance	In-house skills shortage	Lack of commitment / loss of vision Integrating with existing systems Funding issues
Process manufacturing	Lack of commitment / loss of vision	Security issues
Retail	—	Funding issues
Services	Security issues	—

Source: INPUT

Exhibit XII-5

Obstacles to Intranet Development (Banking and Finance)



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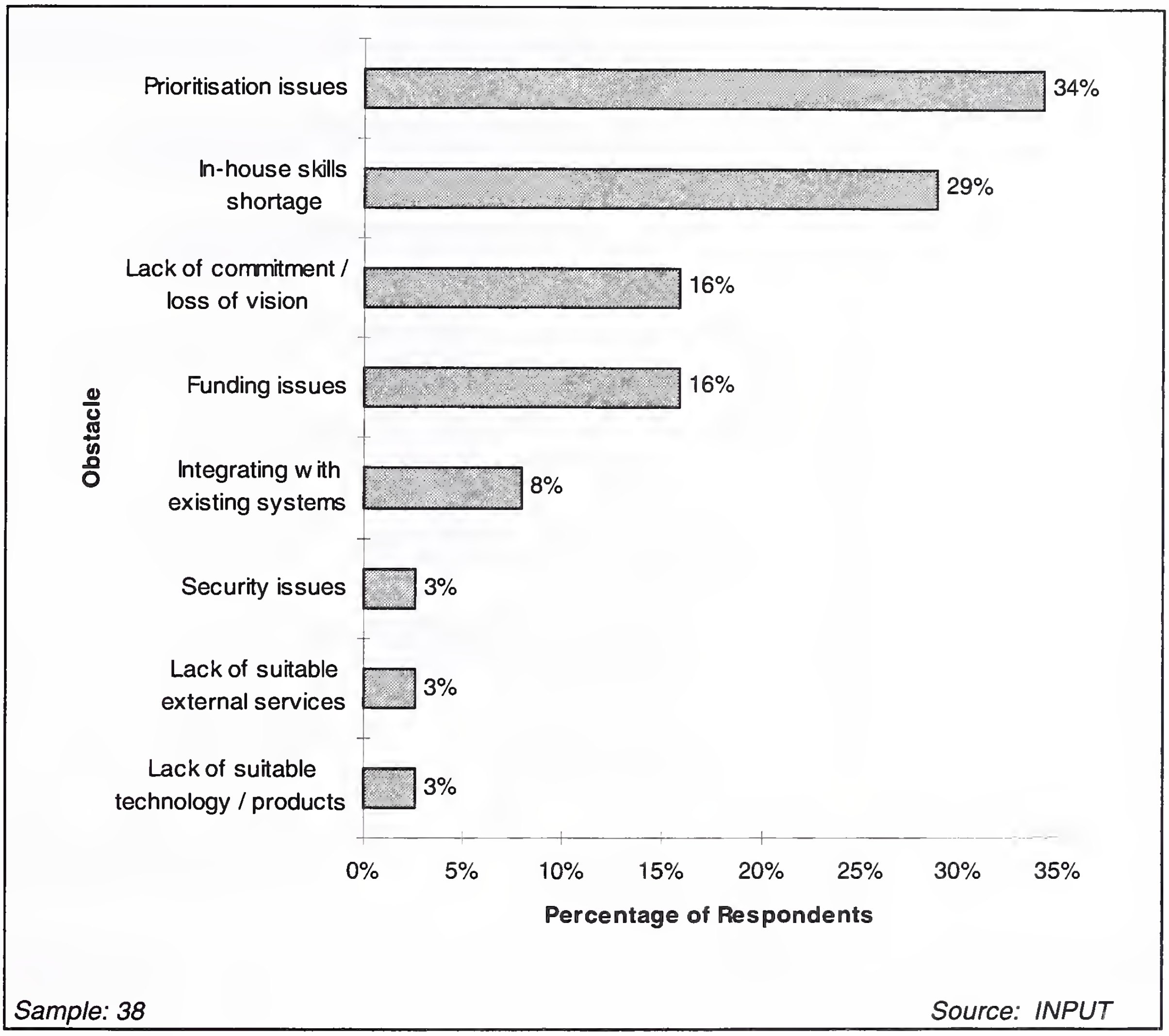
Source: INPUT

Exhibit XII-6

Obstacles to Intranet Development (Discrete Manufacturing)

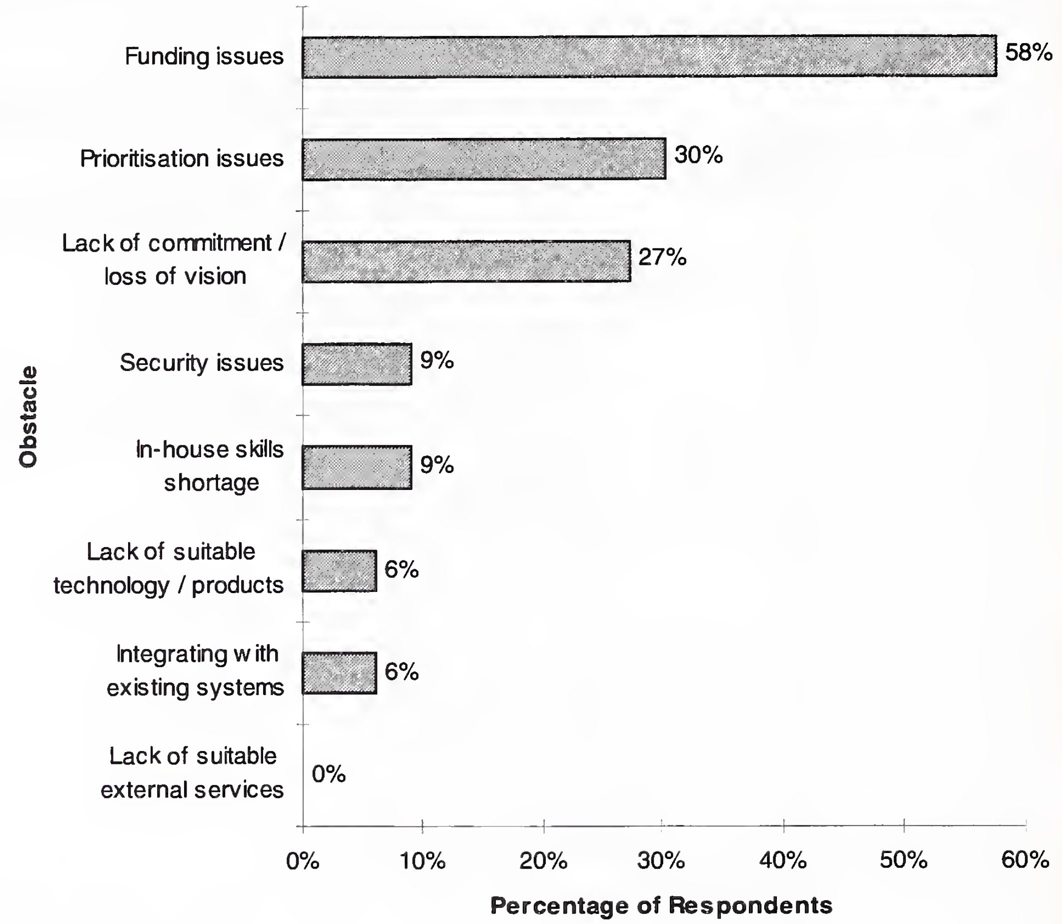


Sample: 38

Source: INPUT

Exhibit XII-7

Obstacles to Intranet Development (Government)

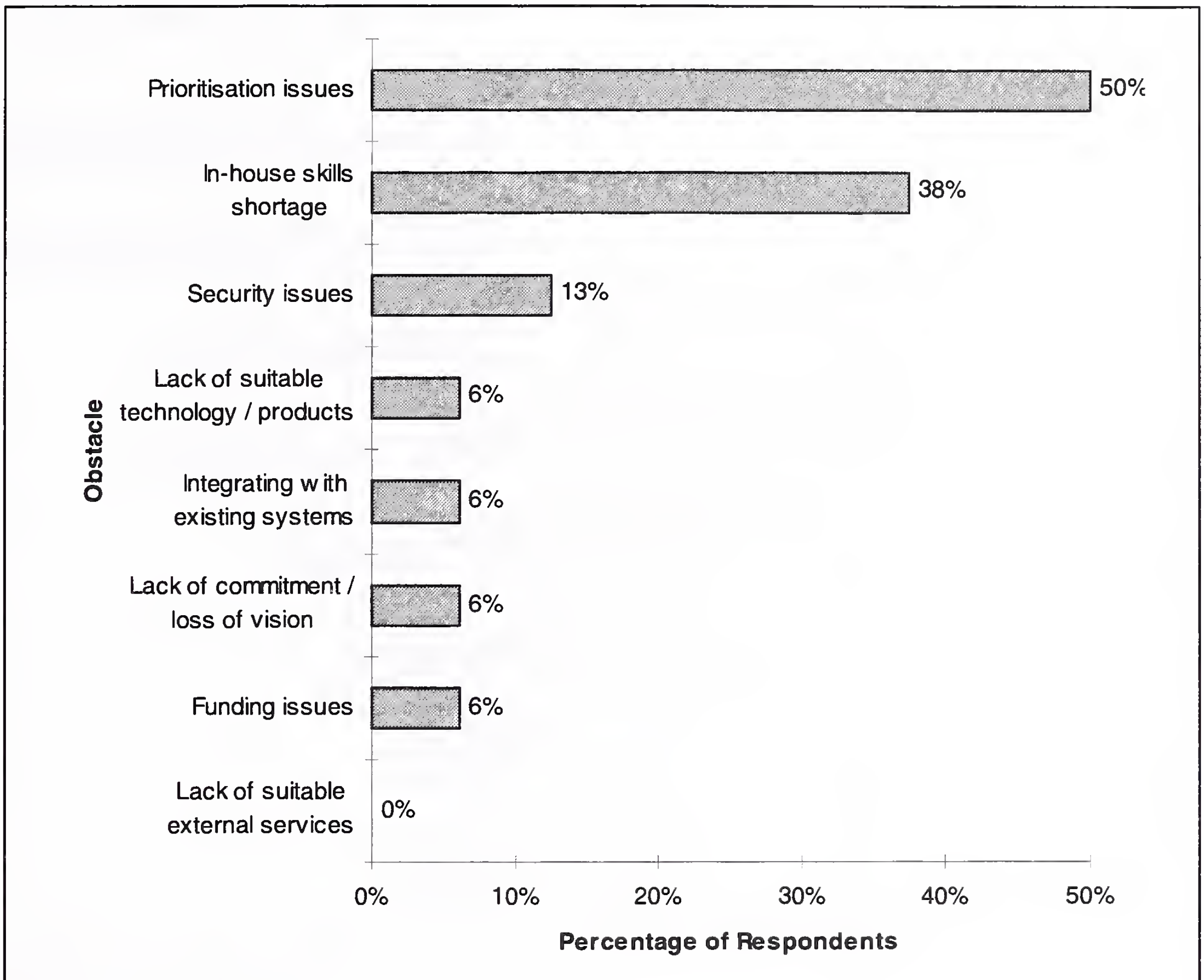


Sample: 33

Source: INPUT

Exhibit XII-8

Obstacles to Intranet Development (Insurance)

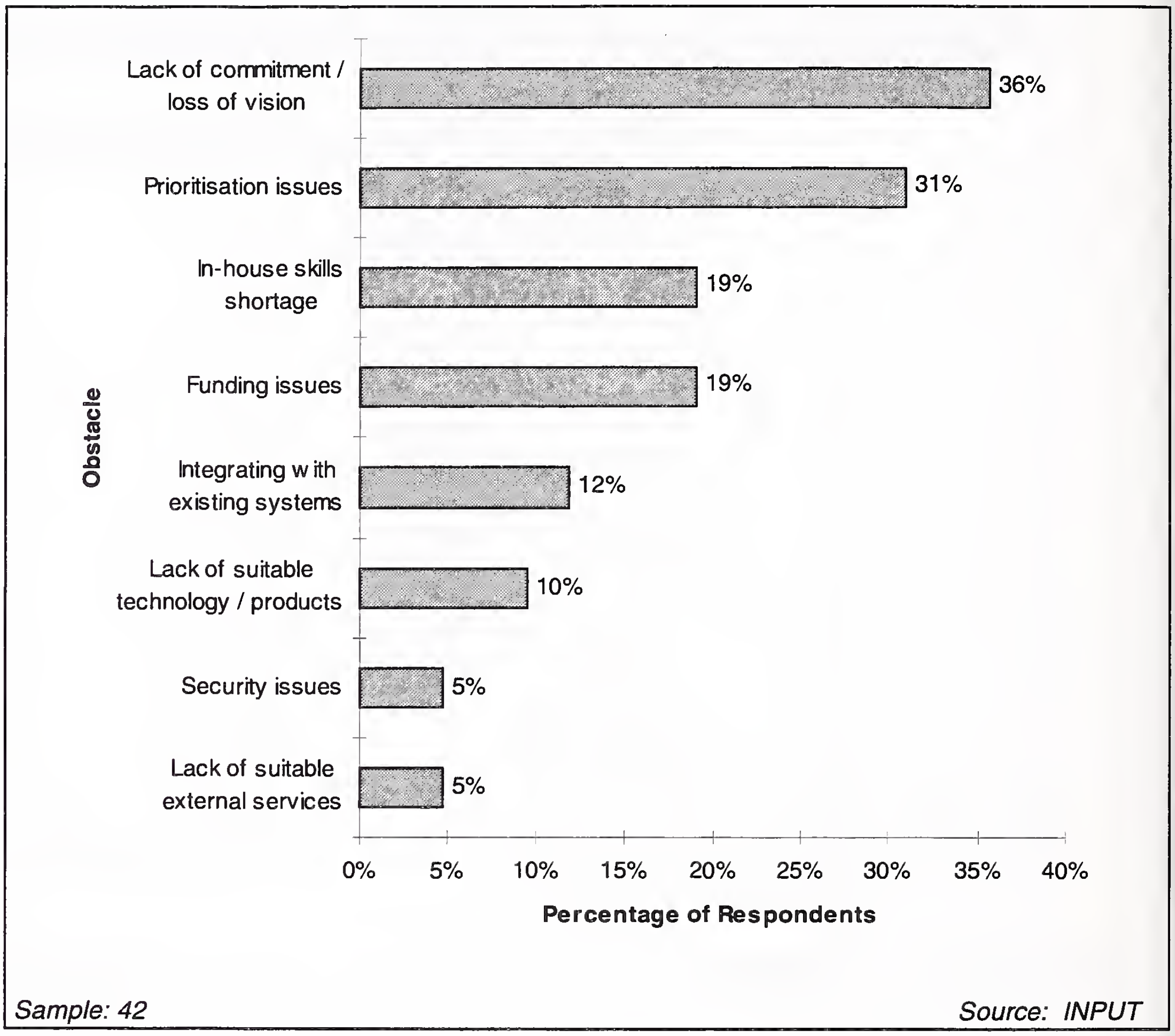


Sample: 16

Source: INPUT

Exhibit XII-9

Obstacles to Intranet Development (Process Manufacturing)

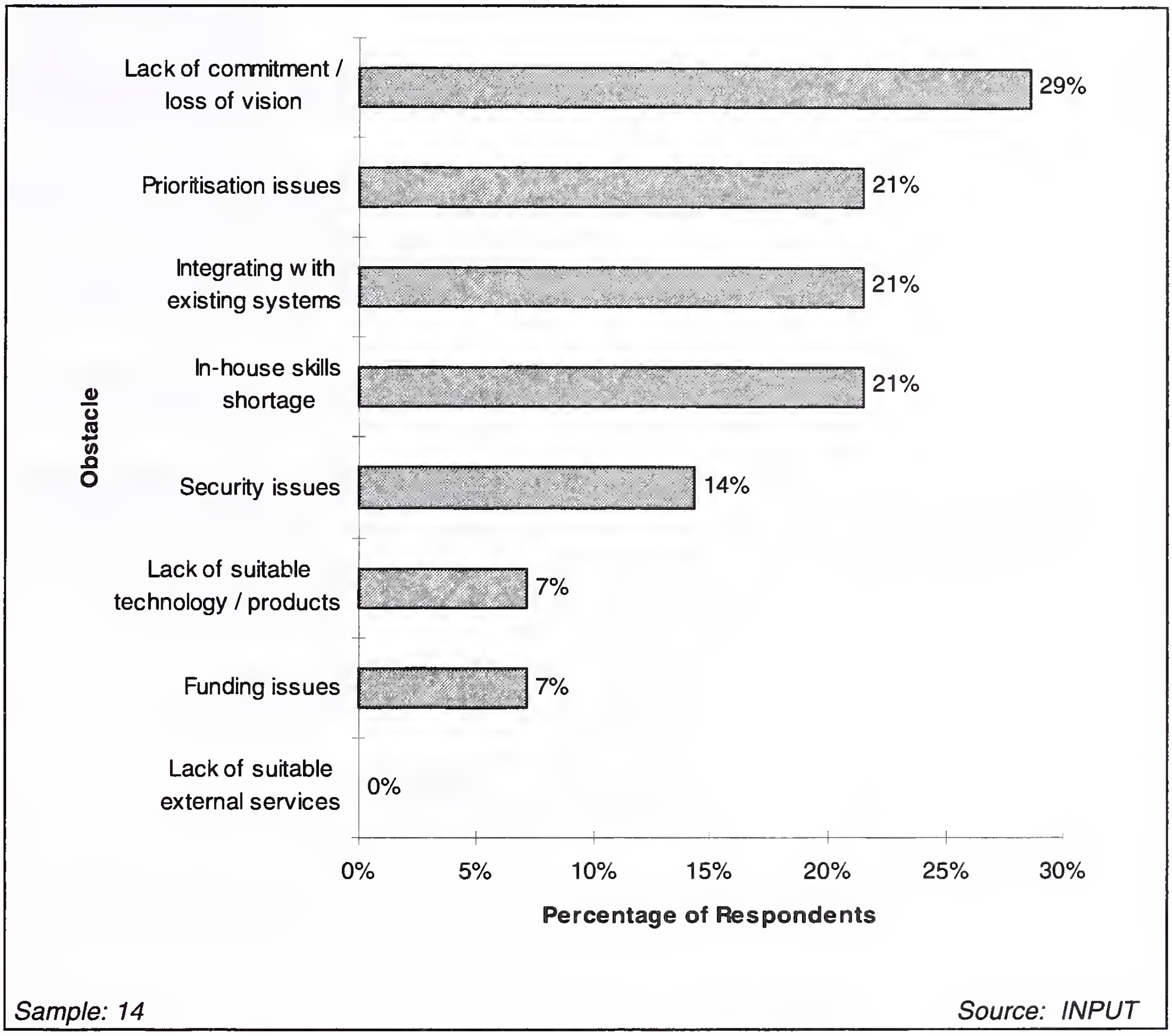


Sample: 42

Source: INPUT

Exhibit XII-10

Obstacles to Intranet Development (Retail)

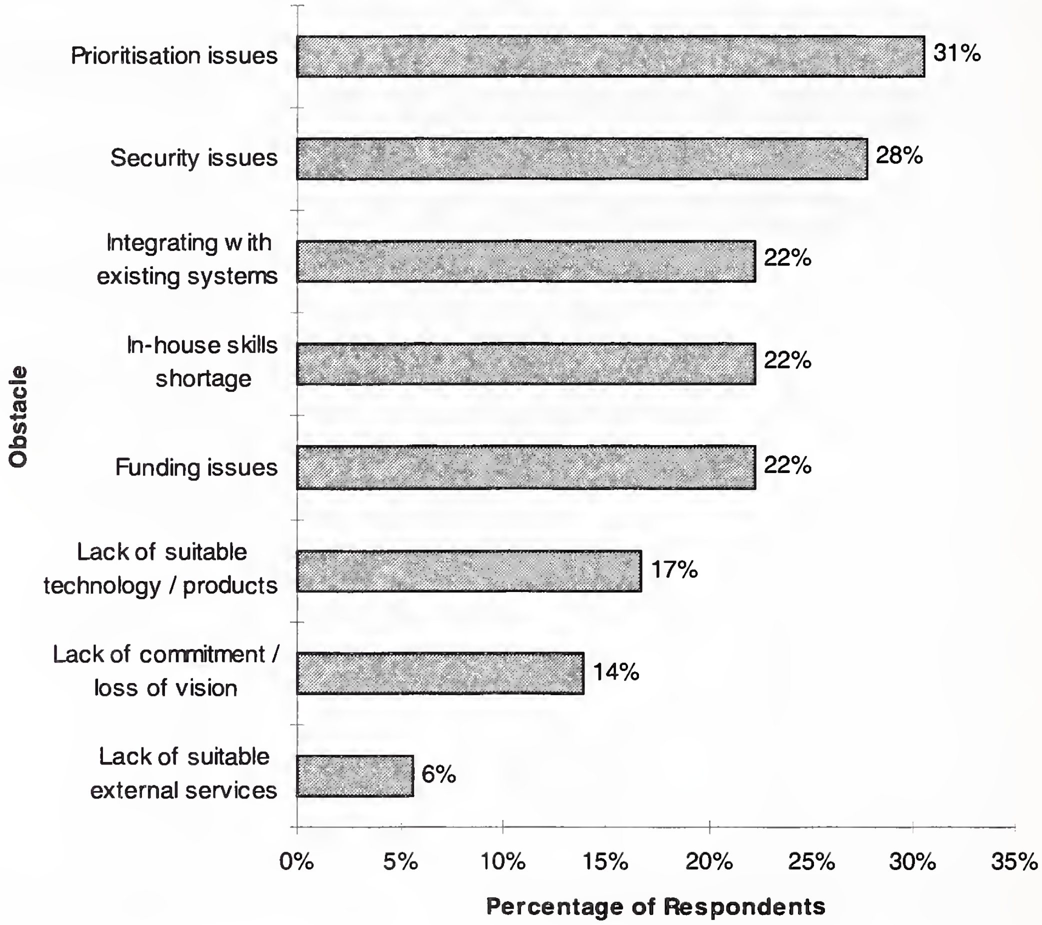


Sample: 14

Source: INPUT

Exhibit XII-11

Obstacles to Intranet Development (Services)



Sample: 36

Source: INPUT

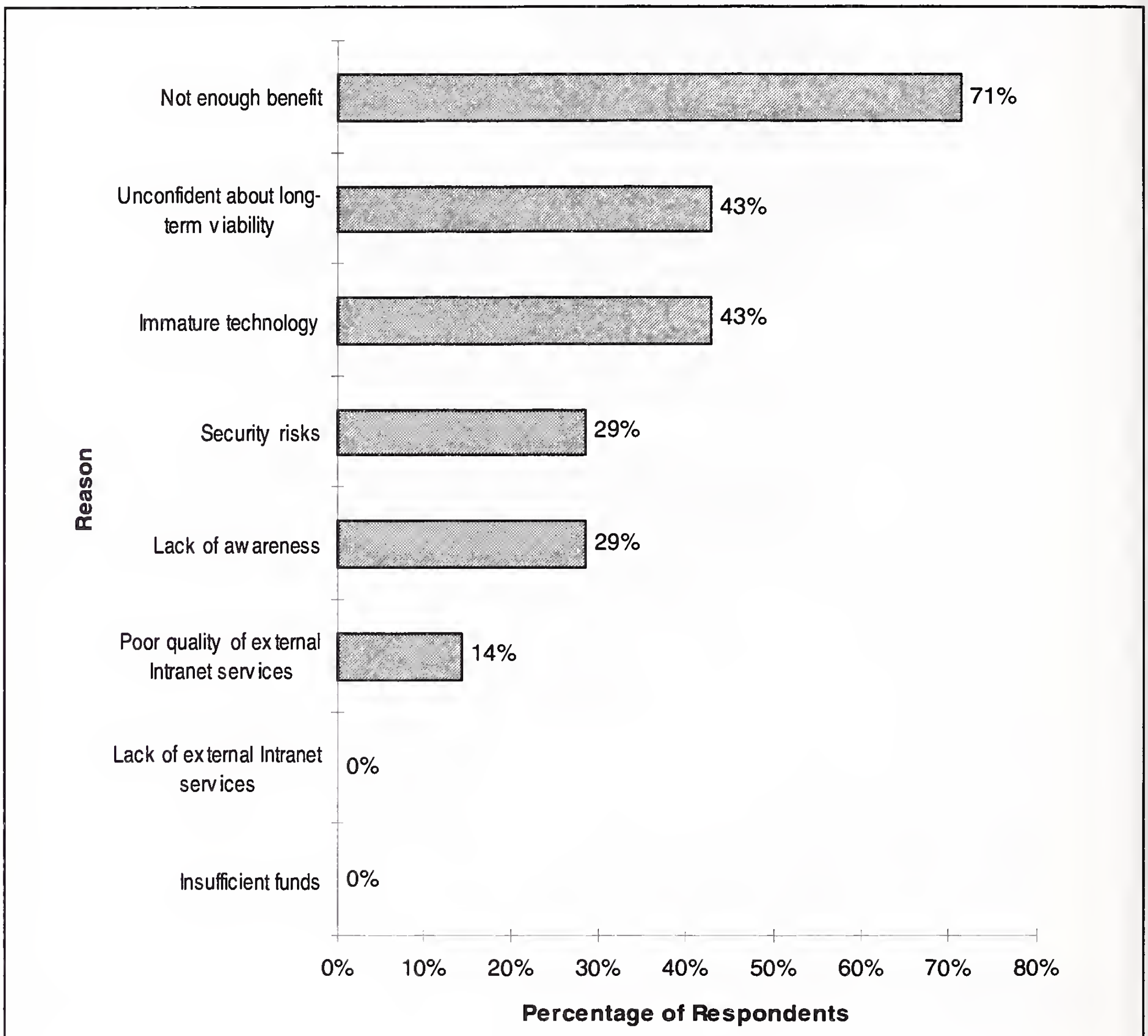
XIII

Intranet Rejectors

Exhibit XIII-1 shows the reasons given by Intranet Rejectors for deciding against implementing an Intranet after considering one. It must be noted that the sample is extremely small, comprising just seven respondents.

Exhibit XIII-1

Reasons for Not Building an Intranet (Intranet Rejectors)



Sample: 7 *Source: INPUT*

Respondents were asked to describe the circumstances under which they would reconsider building an Intranet. The comments they made were as follows:

- “When the Intranet has matured and the network computer debate is resolved”
- “When the technologies mature and we see commercial reasons for doing so”
- “I would want to see Intranets operational for a number of years. It has to prove itself in the long term”

Other comments made by respondents for deciding against an Intranet were:

- “Too many other issues. Lack of initiative from parent company”
- “Too much hype about Intranet; it needs to settle down”
- “Our whole network infrastructure is being upgraded. Until this is completed, we will not have the infrastructure to actually run an Intranet”
- “Too many other things. Intranet does not fit into our IT strategy”
- “Intranet is of no benefit to us. We’re happy with what we are doing”

(Blank)

A

Survey Questionnaire—Intranet Owners

A1. What were the main reasons for you developing an Intranet? *(Tick all that apply)*

To solve a business problem *(If so, what problem?)*	☐

____

____

Cost-saving	☐
Integrating existing systems	☐
Integrating with current or future Web front ends	☐
Business process re-engineering	☐
Ease of access to all types of information	☐
Uniformity / standardisation of platforms	☐
Enabling access to / from outside world	☐
As an ongoing infrastructure upgrade	☐
To prepare for future technology / applications	☐

Other *(specify)*

____

____

A2. What priority does your Intranet have compared with your other IT investments in terms of:

	Low	Medium	High
Implementation	☐	☐	☐
On-going support	☐	☐	☐
Application development	☐	☐	☐

A3. What effect is your Intranet most likely to have over the next two years? *(Tick only one)*

Intranet will gradually displace existing systems ☐
Intranet will quickly displace existing systems ☐
Intranet will integrate with existing systems ☐
Intranet will have little or no effect on existing systems ☐
Other *(specify)* ________________________ ☐

A4. How strongly is your Intranet development influenced by the 'Year 2000' issue? *(1=not influenced, 5=strongly influenced)*

1 2 3 4 5

A5. What is the size of your Intranet? *(Either as number of users / seats or as percentage of all employees)*

____

A6. What primary desktop clients are used to access your Intranet today, and how do you expect their use to change over the next two years? *(Tick all that apply)*

	Today	Increase	Decrease	Stay same
MS Windows	☐	☐	☐	☐
UNIX	☐	☐	☐	☐
Apple Macintosh	☐	☐	☐	☐
OS/2	☐	☐	☐	☐
X terminal	☐	☐	☐	☐
Mainframe terminal	☐	☐	☐	☐
Network Computer	☐	☐	☐	☐
Other	☐	☐	☐	☐
(specify) ____________________				
Other	☐	☐	☐	☐
(specify) ____________________				

A7. What servers do you use to run your Intranet today and how do you expect their use to change over the next two years? *(Tick all that apply)*

	Today	Increase	Decrease	Stay same
Windows NT	☐	☐	☐	☐
UNIX midrange	☐	☐	☐	☐
UNIX enterprise	☐	☐	☐	☐
Mainframe	☐	☐	☐	☐
Other	☐	☐	☐	☐
(specify) ____________________				

A8. Whose Web server do you use primarily and why? *(Tick only one; very short answers are OK)*

		Why
Netscape	☐	________
Microsoft	☐	________
Novell	☐	________
Lotus	☐	________
Open Market	☐	________
NCSA	☐	________
CERN	☐	________
Other	☐	________

(specify) ________

A9. What clients are used to access your Intranet and why? *(Tick all that apply; very short answers are OK))*

		Why
Netscape Navigator	☐	________
Microsoft Internet Explorer	☐	________
Microsoft Office	☐	________
Lotus Notes client	☐	________
Novell Groupwise	☐	________
Other	☐	________

(specify) ________

A10. What applications are you currently using over your Intranet, and are they accessed by the user from a Web browser or from an existing front-end? *(Tick all that apply)*

	Are using	Browser	F-E
ERP (eg SAP)	☐	☐	☐
Project management / workflow	☐	☐	☐
Group collaboration / conferencing	☐	☐	☐
Sales force automation	☐	☐	☐
EIS	☐	☐	☐
Internal information distribution	☐	☐	☐
Purchasing / inventory	☐	☐	☐
General office applications	☐	☐	☐
Other *(specify)* ________		☐	☐
Other *(specify)* ________		☐	☐

A11. For non-trivial Intranet application development, which development tools did you use, and which do you intend to use in the future? *(Tick all that apply)*

	Did use	Will use in future
Java	[ ]	[ ]
ActiveX	[ ]	[ ]
Javascript	[ ]	[ ]
CGI (eg, Perl)	[ ]	[ ]
Other *(specify)*	________________	________________
Other *(specify)*	________________	________________
Other *(specify)*	________________	________________

A12. What do you use to manage your Intranet? *(Tick all that apply)*

Specific Intranet / Web server management tool [ ]
General network management tool [ ]
Manual monitoring / management [ ]
Nothing specifically [ ]
Other *(specify)* ________________________ [ ]
____

A13. What levels of connectivity does your Intranet support? *(Tick all that apply)*

Is connected to public Internet [ ]
Supports home workers [ ]
Supports mobile workers [ ]
Allows access to / from other organisations' Intranets [ ]

A14. What is the level of sensitivity of the most sensitive data on your Intranet? *(Tick only one)*

Low *(e.g. open)* [ ]
Medium *(e.g. private)* [ ]
High *(e.g. confidential)* [ ]

A15. What is the level of criticality of the most critical applications you run on your Intranet? *(Tick only one)*

Low *(e.g. not critical)* [ ]
Medium *(e.g. business process-critical)* [ ]
High *(e.g. mission-critical)* [ ]

A16. Do you currently route financial transactions over your Intranet?

Yes [ ]
No [ ]

A17. Which of the following Intranet services did you use from external service providers and who were those providers? *(Tick all that apply)*

		Which provider?
Business strategy / benefits consultancy	[ ]	____________
Network / infrastructure consultancy	[ ]	____________
Network / infrastructure implementation	[ ]	____________
Application consultancy	[ ]	____________
Application implementation	[ ]	____________
Intranet Web site design / creation	[ ]	____________
Integration of Intranet with existing systems	[ ]	____________
Security consultancy / implementation	[ ]	____________
Education and training	[ ]	____________

A18. How important were the following services in your Intranet development? *(1=not important, 5=very important)*

Business strategy / benefits consultancy	1 2 3 4 5 N/A
Network / infrastructure consultancy	1 2 3 4 5 N/A
Network / infrastructure implementation	1 2 3 4 5 N/A
Application consultancy	1 2 3 4 5 N/A
Application implementation	1 2 3 4 5 N/A
Intranet Web site design / creation	1 2 3 4 5 N/A
Integration of Intranet with existing systems	1 2 3 4 5 N/A
Security consultancy / implementation	1 2 3 4 5 N/A
Education and training	1 2 3 4 5 N/A

A19. How satisfied were you with the services you received? *(1=not satisfied, 5=very satisfied)*

Business strategy / benefits consultancy	1 2 3 4 5 N/A
Network / infrastructure consultancy	1 2 3 4 5 N/A
Network / infrastructure implementation	1 2 3 4 5 N/A
Application consultancy	1 2 3 4 5 N/A
Application implementation	1 2 3 4 5 N/A
Intranet Web site design / creation	1 2 3 4 5 N/A

Integration of Intranet with existing systems	1 2 3 4 5 N/A
Security consultancy / implementation	1 2 3 4 5 N/A
Education and training	1 2 3 4 5 N/A

A20. How could these external services be improved?

Business strategy / benefits consultancy

Network / infrastructure consultancy

Network / infrastructure implementation

Application consultancy

Application implementation

Intranet Web site design / creation

Integration of Intranet with existing systems

Security consultancy / implementation

Education and training

A21. Please break out your Intranet application software development sources *(must add up to 100%)*

In-house development ______ %
Third-party custom development ______ %
Off-the-shelf purchase ______ %

A22. How many of your IS staff have been significantly involved with your Intranet development and what proportion of your total IS staff does that represent?

Number of IS staff __________
Proportion of total IS staff __________ %

A23. Do you intend to, or do you already outsource your Intranet operation? *(Tick only one)*

Yes [ ]
No [ ]

A24. Please describe briefly how Intranet end users are supported / motivated through documentation, training, or other means

A25. Please list any Intranet-related services you require but have not found on offer

A26. Overall, do you favour: *(Tick only one)*

A 'one-stop-shop' Intranet implementation service	[ ]
A mix of suppliers' services at your discretion	[ ]

DEVELOPMENT ISSUES

A27. Which departments have gained significant benefit from your Intranet? *(Tick all that apply)*

Sales	[ ]	
Marketing	[ ]	
Customer service	[ ]	
Engineering / R&D	[ ]	
HR / personnel	[ ]	
Administration	[ ]	
Executive / senior management	[ ]	
Finance / accounting	[ ]	
Other *(specify)*	[ ]	
Other *(specify)*	[ ]	
Other *(specify)*	[ ]	

A28. Which of the following initiated, and which played a major role in your Intranet? *(Tick all that apply)*

	Initiated	Played major role
End users	[ ]	[ ]

Business unit managers	☐	☐	
CEO / Financial Director	☐	☐	
IS department	☐	☐	
Other *(specify)*	☐	☐	______

A29. Please describe your Intranet budget. E.g., was it set by corporate HQ or by local offices? If you had budgetary control, how did you allocate it? Are budget decisions made in the UK or outside? Etc.

______
______
______
______

A30. Please break out the sources of your Intranet budget *(must add up to 100%)*

End users	______ %	
Business unit managers	______ %	
CEO / Financial Director	______ %	
IS department	______ %	
Other *(specify)*	______	______ %

A31. Do you expect your Intranet budget to grow or shrink over the next two years, and by approximately how much?

		By how much *(Get change in % or £)*
Grow	☐	______
Shrink	☐	______
Stay same	☐	

A32. Did your Intranet development end up: *(Tick only one)*

Ahead of time ☐
Behind time ☐
On time ☐

A33. If it was ahead or behind time:

By how much? ______
And why? ______
______
______

A34. Did your Intranet development end up: *(Tick only one)*

Under budget ☐
Over budget ☐
On budget ☐

A35. If it was under or over budget:

By how much? ____________________
And why? ____________________
____
____

A36. What obstacles did you face in building your Intranet? Please briefly describe them *(very short answers are OK)*

		Description
Funding issues	☐	____________
Lack of commitment / loss of vision	☐	____________
In-house skills shortage	☐	____________
Integrating with existing systems	☐	____________
Prioritisation issues	☐	____________
Lack of suitable technology / products	☐	____________
Lack of suitable external services	☐	____________
Security issues	☐	____________
Other *(specify)* ____________ ____________	☐	____________

A37. How integrated are your existing systems with your Intranet now, and how integrated do you expect them to be in two years from now? *(1=not integrated at all, 5=totally integrated)*

Now	Two years from now
1 2 3 4 5	1 2 3 4 5

A38. If 'Now' is 3, 4, or 5, please describe briefly how you achieved this integration (tools used, services employed, etc.)

____
____
____
____

(Blank)

B

Survey Questionnaire—Intranet Builders

B1. Approximately how much of your Intranet implementation have you accomplished? *(0-100%)*

________ %

B2. When do you expect your Intranet to be operational? *(Month / year)*

____

B3. What are the main reasons for you developing an Intranet? *(Tick all that apply)*

To solve a business problem [ ]
(If so, what problem?)
____
____
Cost-saving [ ]
Integrating existing systems [ ]
Integrating with current or future Web front ends [ ]
Business process re-engineering [ ]
Ease of access to all types of information [ ]
Uniformity / standardisation of platforms [ ]
Enabling access to / from outside world [ ]
As an ongoing infrastructure upgrade [ ]
To prepare for future technology / applications [ ]
Other *(specify)*
____
____

B4. What priority does your Intranet have compared with your other IT investments in terms of:

	Low	Medium	High
Implementation	☐	☐	☐
On-going support	☐	☐	☐
Application development	☐	☐	☐

B5. What effect is your Intranet most likely to have over the next two years? *(Tick only one)*

Intranet will gradually displace existing systems	☐
Intranet will quickly displace existing systems	☐
Intranet will integrate with existing systems	☐
Intranet will have little or no effect on existing systems	☐
Other *(specify)* ______________________________	☐

B6. How strongly is your Intranet development influenced by the 'Year 2000' issue? *(1=not influenced, 5=strongly influenced)*

1 2 3 4 5

B7. What will be the size of your Intranet? *(Either as number of users / seats or as percentage of all employees)*

____

B8. What primary desktop clients will be used to access your Intranet today, and how do you expect their use to change over the next two years? *(Tick all that apply)*

	Will use	Increase	Decrease	Stay same
MS Windows	☐	☐	☐	☐
UNIX	☐	☐	☐	☐
Apple Macintosh	☐	☐	☐	☐
OS/2	☐	☐	☐	☐
X terminal	☐	☐	☐	☐
Mainframe terminal	☐	☐	☐	☐
Network Computer	☐	☐	☐	☐
Other	☐	☐	☐	☐
(specify) ____________________				
Other	☐	☐	☐	☐
(specify) ____________________				

B9. What servers will you use to run your Intranet and how do you expect their use to change over the next two years? *(Tick all that apply)*

	Will use	Increase	Decrease	Stay same
Windows NT	[ ]	[ ]	[ ]	[ ]
UNIX midrange	[ ]	[ ]	[ ]	[ ]
UNIX enterprise	[ ]	[ ]	[ ]	[ ]
Mainframe	[ ]	[ ]	[ ]	[ ]
Other	[ ]	[ ]	[ ]	[ ]

(specify) ____________________

B10. Whose Web server will you use primarily and why? *(Tick only one; very short answers are OK)*

		Why
Netscape	[ ]	
Microsoft	[ ]	
Novell	[ ]	
Lotus	[ ]	
Open Market	[ ]	
NCSA	[ ]	
CERN	[ ]	
Other	[ ]	

(specify) ____________________

B11. What clients will be used to access your Intranet and why? *(Tick all that apply; very short answers are OK)*

		Why
Netscape Navigator	[ ]	
Microsoft Internet Explorer	[ ]	
Microsoft Office	[ ]	
Lotus Notes client	[ ]	
Novell Groupwise	[ ]	
Other	[ ]	

(specify) ____________________

B12. What applications will you use over your Intranet, and will they be accessed by the user from a Web browser or from an existing front-end? *(Tick all that apply)*

	Will use	Browser	F-E
ERP (eg SAP)	[ ]	[ ]	[ ]

Project management / workflow	☐	☐	☐
Group collaboration / conferencing	☐	☐	☐
Sales force automation	☐	☐	☐
EIS	☐	☐	☐
Internal information distribution	☐	☐	☐
Purchasing / inventory	☐	☐	☐
General office applications	☐	☐	☐
Other *(specify)* ____________________		☐	☐
Other *(specify)* ____________________		☐	☐

B13. For non-trivial Intranet application development, which development tools are you using, and which do you intend to use in the future? *(Tick all that apply)*

	Did use	Will use in future
Java	☐	☐
ActiveX	☐	☐
Javascript	☐	☐
CGI (eg, Perl)	☐	☐
Other *(specify)*	____________	____________
Other *(specify)*	____________	____________
Other *(specify)*	____________	____________

B14. What do you intend to use to manage your Intranet? *(Tick all that apply)*

Specific Intranet / Web server management tool	☐
General network management tool	☐
Manual monitoring / management	☐
Nothing specifically	☐
Other *(specify)* ____________________ ____________________	☐

B15. What levels of connectivity will your Intranet support? *(Tick all that apply)*

Will be connected to public Internet	☐
Will support home workers	☐
Will support mobile workers	☐
Will allows access to / from other organisations' Intranets	☐

B16. What is the level of sensitivity of the most sensitive data on your Intranet? *(Tick only one)*

Low *(e.g. open)*	☐
Medium *(e.g. private)*	☐

High *(e.g. confidential)* ☐

B17. What is the level of criticality of the most critical applications you run on your Intranet? *(Tick only one)*

Low *(e.g. not critical)* ☐
Medium *(e.g. business process-critical)* ☐
High *(e.g. mission-critical)* ☐

B18. Will you be routing financial transactions over your Intranet?

Yes ☐
No ☐

B19. Which of the following Intranet services are you using from external service providers and who are those providers? *(Tick all that apply)*

	Which provider?
Business strategy / benefits consultancy	☐
____________________	
Network / infrastructure consultancy	☐
____________________	
Network / infrastructure implementation	☐
____________________	
Application consultancy	☐
____________________	
Application implementation	☐
____________________	
Intranet Web site design / creation	☐
____________________	
Integration of Intranet with existing systems	☐
____________________	
Security consultancy / implementation	☐
____________________	
Education and training	☐
____________________	

B20. How important are the following services in your Intranet development? *(1=not important, 5=very important)*

Business strategy / benefits consultancy	1 2 3 4 5 N/A
Network / infrastructure consultancy	1 2 3 4 5 N/A
Network / infrastructure implementation	1 2 3 4 5 N/A
Application consultancy	1 2 3 4 5 N/A
Application implementation	1 2 3 4 5 N/A

Intranet Web site design / creation	1 2 3 4 5 N/A
Integration of Intranet with existing systems	1 2 3 4 5 N/A
Security consultancy / implementation	1 2 3 4 5 N/A
Education and training	1 2 3 4 5 N/A

B21. How satisfied are you with the services received so far? *(1=not satisfied, 5=very satisfied)*

Business strategy / benefits consultancy	1 2 3 4 5 N/A
Network / infrastructure consultancy	1 2 3 4 5 N/A
Network / infrastructure implementation	1 2 3 4 5 N/A
Application consultancy	1 2 3 4 5 N/A
Application implementation	1 2 3 4 5 N/A
Intranet Web site design / creation	1 2 3 4 5 N/A
Integration of Intranet with existing systems	1 2 3 4 5 N/A
Security consultancy / implementation	1 2 3 4 5 N/A
Education and training	1 2 3 4 5 N/A

B22. How could these external services be improved?

Business strategy / benefits consultancy

____

Network / infrastructure consultancy

____

Network / infrastructure implementation

____

Application consultancy

____

Application implementation

____

Intranet Web site design / creation

____

Integration of Intranet with existing systems

____

Security consultancy / implementation

____

Education and training

____

B23. Please break out your Intranet application software development sources *(must add up to 100%)*

In-house development ______ %
Third-party custom development ______ %
Off-the-shelf purchase ______ %

B24. How many of your IS staff are significantly involved with your Intranet development and what proportion of your total IS staff does that represent?

Number of IS staff __________
Proportion of total IS staff __________ %

B25. Do you intend to outsource your Intranet operation? *(Tick only one)*

Yes ☐
No ☐

B26. Please describe briefly how Intranet end users will be supported / motivated through documentation, training, or other means

____
____
____
____
____

B27. Please list any Intranet-related services you require but have not found on offer

____
____
____
____
____

B28. Overall, do you favour: *(Tick only one)*

A 'one-stop-shop' Intranet implementation service ☐
A mix of suppliers' services at your discretion ☐

B29. Which departments are expected to gain significant benefit from your Intranet? *(Tick all that apply)*

Sales ☐
Marketing ☐
Customer service ☐
Engineering / R&D ☐
HR / personnel ☐
Administration ☐
Executive / senior management ☐
Finance / accounting ☐
Other *(specify)* ☐ ____________________

Other *(specify)* ☐ ____________________
Other *(specify)* ☐ ____________________

B30. Which of the following initiated, and which are playing a major role in your Intranet? *(Tick all that apply)*

	Initiated	Playing major role	
End users	☐	☐	
Business unit managers	☐	☐	
CEO / Financial Director	☐	☐	
IS department	☐	☐	
Other *(specify)*	☐	☐	______________

B31. Please describe your Intranet budget. E.g., was it set by corporate HQ or by local offices? If you had budgetary control, how did you allocate it? Are budget decisions made in the UK or outside? Etc.

____
____
____
____

B32. Please break out the sources of your Intranet budget *(must add up to 100%)*

End users ______ %
Business unit managers ______ %
CEO / Financial Director ______ %
IS department ______ %
Other *(specify)* ____________________ ______ %

B33. Do you expect your Intranet budget to grow or shrink over the next two years, and by approximately how much?

		By how much *(Get change in % or £)*
Grow	☐	______________
Shrink	☐	______________
Stay same	☐	

B34. Do you expect your Intranet development to end up: *(Tick only one)*

Ahead of time ☐
Behind time ☐
On time ☐

B35. If ahead or behind time:

By how much? ____________________

And why? ____________________

____

____

B36. Do you expect your Intranet development to end up: *(Tick only one)*

Under budget	[ ]
Over budget	[ ]
On budget	[ ]

B37. If under or over budget:

By how much? ____________________

And why? ____________________

____

____

B38. What obstacles do you expect to face in building your Intranet? Please briefly describe them *(very short answers are OK)*

		Description
Funding issues	[ ]	____________
Lack of commitment / loss of vision	[ ]	____________
In-house skills shortage	[ ]	____________
Integrating with existing systems	[ ]	____________
Prioritisation issues	[ ]	____________
Lack of suitable technology / products	[ ]	____________
Lack of suitable external services	[ ]	____________
Security issues	[ ]	____________
Other *(specify)* ____________ ____________	[ ]	____________

B39. How integrated will your existing systems be with your Intranet, and how integrated do you expect them to be in two years from now? *(1=not integrated at all, 5=totally integrated)*

Will be	Two years from now
1 2 3 4 5	1 2 3 4 5

B40. If 'Will be' is 3, 4, or 5, please describe briefly how you will achieve this integration (tools used, services employed, etc.)

____

____

(Blank)

C

Survey Questionnaire—Intranet Evaluators

C1. Approximately when do you expect to have decided whether to develop an Intranet or not? *(Month / year)*

____

C2. What are the main reasons for you considering an Intranet? *(Tick all that apply)*

To solve a business problem ☐
(If so, what problem?)

____

____

Cost-saving ☐
Integrating existing systems ☐
Integrating with current or future Web front ends ☐
Business process re-engineering ☐
Ease of access to all types of information ☐
Uniformity / standardisation of platforms ☐
Enabling access to / from outside world ☐
As an ongoing infrastructure upgrade ☐
To prepare for future technology / applications ☐
Other *(specify)*

____

____

C3. How widespread would you expect an Intranet in your organisation to be? *(Either as number of users / seats or as percentage of all employees)*

____

C4. What applications would you use over an Intranet, and would they most likely be accessed by the user from a Web browser or from an existing front-end? *(Tick all that apply)*

	Would use	Browser	F-E
ERP (eg SAP)	☐	☐	☐
Project management / workflow	☐	☐	☐
Group collaboration / conferencing	☐	☐	☐
Sales force automation	☐	☐	☐
EIS	☐	☐	☐
Internal information distribution	☐	☐	☐
Purchasing / inventory	☐	☐	☐
General office applications	☐	☐	☐
Other *(specify)* ____________________		☐	☐
Other *(specify)* ____________________		☐	☐

C5. What effect would an Intranet in your organisation be most likely to have over the next two years? *(Tick only one)*

Intranet will gradually displace existing systems ☐
Intranet will quickly displace existing systems ☐
Intranet will integrate with existing systems ☐
Intranet will have little or no effect on existing systems ☐
Other *(specify)* ____________________ ☐

C6. What levels of connectivity would your Intranet support? *(Tick all that apply)*

Would be connected to public Internet ☐
Would support home workers ☐
Would support mobile workers ☐
Would allow access to / from other organisations ☐

C7. How strongly is your Intranet consideration and decision being influenced by the 'Year 2000' issue? *(1=not influenced, 5=strongly influenced)*

1 2 3 4 5

C8. Which of the following Intranet services would you be likely to use and have you identified any likely providers of those services? *(Tick all that apply)*

	Which provider?
Business strategy / benefits consultancy	☐

____

Network / infrastructure consultancy [ ]

____

Network / infrastructure implementation [ ]

____

Application consultancy [ ]

____

Application implementation [ ]

____

Intranet Web site design / creation [ ]

____

Integration of Intranet with existing systems [ ]

____

Security consultancy / implementation [ ]

____

Education and training [ ]

____

C9. How important would the following services be in your Intranet development? *(1=not important, 5=very important)*

Business strategy / benefits consultancy	1 2 3 4 5 N/A
Network / infrastructure consultancy	1 2 3 4 5 N/A
Network / infrastructure implementation	1 2 3 4 5 N/A
Application consultancy	1 2 3 4 5 N/A
Application implementation	1 2 3 4 5 N/A
Intranet Web site design / creation	1 2 3 4 5 N/A
Integration of Intranet with existing systems	1 2 3 4 5 N/A
Security consultancy / implementation	1 2 3 4 5 N/A
Education and training	1 2 3 4 5 N/A

C10. Would you intend to outsource your Intranet operation? *(Tick only one)*

Yes [ ]
No [ ]

C11. Please list any Intranet-related services you would require but have not found on offer

____
____
____
____
____

C12. Would you prefer to use: *(Tick only one)*

A 'one-stop-shop' Intranet implementation service ☐
A mix of suppliers' services at your discretion ☐

C13. What are the most likely reasons for not implementing an Intranet, were the decision not to implement to be made? *(Tick all that apply)*

Insufficient funds ☐
Not enough benefit ☐
In-house skills shortage ☐
Lack of awareness ☐
Lack of suitable technology / products ☐
Lack of suitable external services ☐
Security risks ☐
Unconfident about long-term viability ☐
Other *(specify)* ______________ ☐
____

C14. Which departments do you think would gain significant benefit from an Intranet in your organisation? *(Tick all that apply)*

Sales ☐
Marketing ☐
Customer service ☐
Engineering / R&D ☐
HR / personnel ☐
Administration ☐
Executive / senior management ☐
Finance / accounting ☐
Other *(specify)* ☐ ______________
Other *(specify)* ☐ ______________
Other *(specify)* ☐ ______________

C15. Which of the following initiated, and which are playing major roles in your Intranet considerations? *(Tick all that apply)*

	Initiated	Played major role	
End users	☐	☐	
Business unit managers	☐	☐	
CEO / Financial Director	☐	☐	
IS department	☐	☐	
Other *(specify)*	☐	☐	______________

C16. How do expect your Intranet budget to be allocated? Might it be set by corporate HQ or by local offices? If you had budgetary control, how would you allocate it? Who is likely to provide the budget (end users, business unit managers, CEO/FD, IS department etc)? Would budget decisions be made in the UK or outside? Etc.

C17. What obstacles to building your Intranet do you perceive? Please briefly describe them *(very short answers are OK)*

		Description
Funding issues	☐	______________
Lack of commitment / loss of vision	☐	______________
In-house skills shortage	☐	______________
Integrating with existing systems	☐	______________
Prioritisation issues	☐	______________
Lack of suitable technology / products	☐	______________
Lack of suitable external services	☐	______________
Security issues	☐	______________
Other *(specify)* ______________	☐	______________

C18. How tightly would you expect to integrate your existing systems with your Intranet? *(1=not integrated at all, 5=totally integrated)*

1 2 3 4 5

C19. If 3, 4, or 5, please describe briefly how you would achieve this integration (tools used, services employed, etc.)

(Blank)

D

Survey Questionnaire—Intranet Rejectors

D1. Have you considered an Intranet?

Yes [ ]
No [ ]

If No, why not?

____

____

Then terminate interview

D2. Why have you decided not to implement an Intranet? *(Tick all that apply)*

Insufficient funds [ ]
Not enough benefit [ ]
Lack of awareness [ ]
Lack of external Intranet services [ ]
Poor quality of external Intranet services [ ]
Security risks [ ]
Immature technology [ ]
Unconfident about long-term viability [ ]
Other *(specify)* ______________ [ ]
____

D3. If you have found external Intranet services lacking, how do you feel they could be improved?

____

____

____

____

D4. Please describe the circumstances under which you would reconsider implementing an Intranet

(Blank)